Introduction

The *2003 U.S. Grain Exports: Quality Report* is produced by the Federal Grain Inspection Service (FGIS) of the U.S. Department of Agriculture's Grain Inspection, Packers and Stockyards Administration. The report is the result of FGIS' efforts to determine, document, and disseminate critical information regarding U.S. export grain quality.

The 2003 report is the twentieth edition of this annual summary of export grain quality. The report summarizes the quality of export wheat, corn, soybeans, sorghum, barley, sunflower seeds, canola, and flaxseed. Mixed grain and rye are not included in this year's report; no lots have been reported in the past 3 years.

Organization of the Report

The report contains chapters addressing export wheat, export corn, export soybeans, and other grains. Each chapter contains:

* standards and definitions for each grain,
* tables that clearly illustrate all factor result averages at each applicable U.S. grade level, and
* factor quality distribution graphs for selected factors.

In addition, an appendix contains figures illustrating select quantity and quality trends over time.

Methodology

FGIS collects and documents information about export grain shipments in the automated Export Grain Information System (EGIS). This system contains one record for each export lot inspected and/or weighed. In the case of some railcar exports, each record may contain information from several lots which were aggregated to simplify internal reporting. For the purposes of this export quality report, only information from waterborne export shipments were used. Waterborne export shipments represented 94.2 percent of the total export lots in the EGIS database for 2003.

Generally, each EGIS record contains the quantity of the lot and the average factor results certified for the lot. The tables in this report contain descriptive statistics which summarize these lot quantities and the weighted averages. Where appropriate, tables are provided which show the number of lots and the quantity of grain which was used to generate the descriptive statistics. Many of the tables summarize factor averages by grade.

A U.S. grade is determined by analyzing the physical and biological factors present in the sample. Limits for the grading factors are established for each numerical grade. Grades range from U.S. No. 1 (highest) to U.S. Sample grade (lowest). When a particular grade is cited in this report, it includes lots certified at that grade plus lots certified with the "or better" designation. For example, U.S. No. 2 grade includes lots which were certificated as "U.S. No. 2" and lots certificated as "U.S. No. 2 or better." Factors that exceed the established limits, except for test weight, lower the grade. The established limits for test weight represent minimum requirements for each grade.

This report does not contain data on the volume of export grain in bushels. Listed below are the equations for converting the approximate quantity of grain from metric tons to bushels.

Conversion Equation

$$\textbf{Bushels} = \frac{\text{Metric Tons} \times 2204.622 \text{ Pounds}}{\text{Legal Test Weight/Bushel of Grain}}$$

Legal Test Weight Per Bushel for Specific Grains

Wheat =	60 pounds/bushel
Corn =	56 pounds/bushel
Soybeans =	60 pounds/bushel
Canola =	50 pounds/bushel
Sorghum =	56 pounds/bushel
Barley =	48 pounds/bushel
Sunflower Seed =	28 pounds/bushel
Rye =	56 pounds/bushel
Oats =	32 pounds/bushel

Export Wheat

Wheat Grades and Grade Requirements

Wheat is divided into eight classes: Hard Red Spring wheat, Hard Red Winter wheat, Soft Red Winter wheat, Durum wheat, Hard White wheat, Soft White wheat, Unclassed wheat, and Mixed wheat. The classes Hard Red Spring wheat, Soft White wheat, and Durum wheat are further divided into subclasses. There are no subclasses in the classes Hard Red Winter wheat, Soft Red Winter wheat, Hard White wheat, Unclassed wheat, and Mixed wheat. Each class and subclass is divided into five U.S. numerical grades and U.S. Sample grade. Special grades are provided to emphasize special qualities or conditions affecting the value of wheat. Special grades are added to and made a part of the grade designation. They do not affect the numerical or Sample grade designation.

U.S. Standards for Wheat

Grade	Minimum limits of--		Maximum limits of--						
	Test weight per bushel		Damaged kernels		Foreign Material	Shrunken and broken kernels	Defects[3] (total)	Wheat of other classes[4]	
	Hard Red Spring wheat or White Club wheat[1] (pounds)	All other classes and subclasses (pounds)	Heat-damaged kernels (percent)	Total[2] (percent)	(percent)	(percent)	(percent)	Contrasting classes (percent)	Total[5] (percent)
U.S. No. 1	58.0	60.0	0.2	2.0	0.4	3.0	3.0	1.0	3.0
U.S. No. 2	57.0	58.0	0.2	4.0	0.7	5.0	5.0	2.0	5.0
U.S. No. 3	55.0	56.0	0.5	7.0	1.3	8.0	8.0	3.0	10.0
U.S. No. 4	53.0	54.0	1.0	10.0	3.0	12.0	12.0	10.0	10.0
U.S. No. 5	50.0	51.0	3.0	15.0	5.0	20.0	20.0	10.0	10.0
U.S. Sample grade									

U.S. Sample grade is wheat that:

(a) Does not meet the requirements for the grades U.S. Nos. 1, 2, 3, 4, or 5; or

(b) Contains 32 or more insect-damaged kernels per 100 grams of wheat, or

(c) Contains 4 or more stones or any number of stones which have an aggregate weight in excess of 0.1 percent of the sample weight, 1 or more pieces of glass, 3 or more crotalaria seeds (*Crotalaria* spp.), 2 or more castor beans (*Rincinus communis* L.), 4 or more particles of an unknown foreign substance(s) or a commonly recognized harmful or toxic substance(s), 2 or more rodent pellets, bird dropping, or an equivalent quantity of other animal filth, five or more pieces of animal filth, castor beans, crotalaria seeds, glass, stones, or unknown foreign substances, in combination, per 1,000 grams of wheat; or

(d) Has a musty, sour, or commercially objectionable foreign odor (except smut or garlic odor); or

(e) Is heating or otherwise of distinctly low quality.

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[1] These requirements also apply when Hard Red Spring or White Club wheat predominates in a sample of Mixed wheat.

[2] Includes heat-damaged kernels.

[3] Defects include damaged kernels (total), foreign material, and shrunken and broken kernels. The sum of these three factors may not exceed the limit for defects for each numerical grade.

[4] Unclassed wheat of any grade may contain not more than 10.0 percent of wheat of other classes.

[5] Includes contrasting classes.

Definitions

Test weight (lb/bu) is pounds of grain per Winchester bushel, determined by an approved device after the removal of dockage.

Test weight (kg/hl) is the metric system equivalent to pounds per bushel. Kilograms per hectoliter are calculated as follows:

For **Durum** wheat, multiply pounds per bushel by 1.292 and add 0.630. For **all other classes of wheat**, multiply pounds per bushel by 1.292 and add 1.419.

Heat-damaged kernels are kernels, pieces of wheat kernels, and other grains which have been materially discolored and damaged by heat.

Damaged kernels (total) are kernels, pieces of wheat kernels, and other grains that are badly ground-damaged, badly weather-damaged, diseased, frost-damaged, heat-damaged, insect bored, mold-damaged, sprout-damaged, or otherwise materially damaged.

Foreign material is all matter other than wheat which remains in a sample after removal of dockage and shrunken and broken kernels.

Shrunken and broken kernels are kernels, kernel pieces, and other matter that pass through a 0.064-by 3/8-inch oblong-hole sieve.

Total defects are the sum of three factors: damaged kernels (total), shrunken and broken kernels, and foreign material. In the factor summary tables, the average values listed for total defects may not equal the sum of the component factor averages due to rounding.

Dockage includes all matter other than wheat that can be removed from the original sample by use of an approved device. The percentage of dockage in a sample does not affect the numerical grade.

Moisture is the water content of grain as determined by an approved electronic moisture meter. The percentage of moisture in a sample does not affect the numerical grade.

Contrasting classes include:

* Durum, Hard White, Soft White, and Unclassed wheats in the classes Hard Red Spring and Hard Red Winter wheats.
* Hard Red Spring, Hard Red Winter, Hard White, Soft Red Winter, Soft White, and Unclassed wheats in the class Durum wheat.
* Durum and Unclassed wheats in the class Soft Red Winter wheat.
* Durum, Hard Red Spring, Hard Red Winter, Soft Red Winter and Unclassed wheats in the classes Hard White wheat and Soft White wheat.

Wheat of other classes is any class that is mixed with the predominant class.

Protein is the protein content of grain as determined by an approved near infrared transmittance (NIRT) instrument calibrated against a Combustion Nitrogen Analyzer, or CNA (percent nitrogen multiplied by 5.7). The percentage of protein in a sample does not affect the numerical grade. Protein is certified on a 12 percent moisture basis.

Mixed wheat is a combination of classes of wheat which does not meet the minimum requirements of a specific class.

Table 1. U.S. Wheat Exports: Number of lots and quantity exported by class and grade, 2001-2003

Class	Grade	2001		2002		2003	
		Number of Lots	Metric Tons	Number of Lots	Metric Tons	Number of Lots	Metric Tons
Hard Red Winter Wheat	U.S. No. 1	79	528,603	83	523,847	80	504,345
	U.S. No. 2	554	8,512,510	608	8,527,126	670	9,678,323
	U.S. No. 3	--	--	--	--	--	--
	All lots	633	9,041,113	691	9,050,973	750	10,182,668
Hard Red Spring Wheat	U.S. No. 1	125	1,250,842	125	1,297,835	125	1,384,272
	U.S. No. 2	496	4,928,681	494	5,456,054	480	5,205,354
	U.S. No. 3	--	--	--	--	1	2,569
	U.S. No. 4	--	--	1	2,123	--	--
	All lots	621	6,179,523	620	6,756,012	606	6,592,195
Soft Red Winter Wheat	U.S. No. 1	5	50,533	1	2,752	--	--
	U.S. No. 2	373	4,920,037	315	3,455,327	282	3,045,464
	U.S. No. 3	4	12,065	1	1,604	5	101,233
	U.S. No. 4	--	--	--	--	--	--
	U.S. No. 5	--	--	--	--	--	--
	U.S. Sample Grade	--	--	--	--	1	4,823
'	All lots	384	5,012,518	317	3,459,683	288	3,151,520
Durum Wheat	U.S. No. 1	22	207,388	38	308,875	38	363,228
	U.S. No. 2	39	211,915	50	407,643	54	426,565
	U.S. No. 3	13	226,073	2	28,906	2	30,186
	U.S. No. 4	1	17,309	1	2,750	--	--
	U.S. No. 5	28	402,705	4	69,676	3	36,255
	U.S. Sample Grade	17	134,141	3	37,027	4	71,764
	All lots	120	1,199,531	98	854,877	101	927,998
Soft White Wheat	U.S. No. 1	159	719,285	174	755,423	177	766,409
	U.S. No. 2	249	4,131,529	207	3,164,114	180	3,226,837
	All lots	408	4,850,814	381	3,919,537	357	3,993,246
Hard White Wheat	U.S. No. 2	4	18,846	5	12,505	6	73,292
	All lots	4	18,846	5	12,505	6	73,292
Mixed Wheat	U.S. No. 2	--	--	2	12,205	7	39,206
	All lots	--	--	2	12,205	7	39,206
All Classes	U.S. No. 1	390	2,756,651	421	2,888,732	420	3,018,254
	U.S. No. 2	1,715	22,723,518	1,681	21,034,974	1,679	21,695,041
	U.S. No. 3	17	238,138	3	30,510	8	133,988
	U.S. No. 4	1	17,309	2	4,873	--	--
	U.S. No. 5	28	402,705	4	69,676	3	36,255
	U.S. Sample Grade	17	134,141	3	37,027	5	76,587
	All lots	2,170	26,300,010	2,114	24,065,792	2,115	24,960,125

-- = No lots reported in this category.

Table 2. Summary of export Hard Red Winter wheat quality, 2001-2003

			2001				2002				2003			
Factor	Grade	Grade Limit	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High
Test Weight (lb/bu)	U.S. No. 1	60.0	79	61.6	60.1	63.4	83	61.1	60.1	62.9	80	61.5	60.1	63.4
	U.S. No. 2	58.0	554	61.0	58.1	63.7	608	60.8	58.4	64.2	670	60.9	58.0	63.9
	All lots	N/A	633	61.0	58.1	63.7	691	60.8	58.4	64.2	750	60.9	58.0	63.9
Test Weight (kg/hl)	U.S. No. 1	N/A	79	81.0	79.1	83.3	83	80.4	79.1	82.7	80	80.8	79.1	83.3
	U.S. No. 2	N/A	554	80.2	76.5	83.7	608	79.9	76.8	84.4	670	80.1	76.4	84.0
	All lots	N/A	633	80.2	76.5	83.7	691	80.0	76.8	84.4	750	80.1	76.4	84.0
Moisture	U.S. No. 1	N/A	79	10.7	9.0	12.5	83	10.7	8.1	12.2	80	10.0	8.4	11.7
	U.S. No. 2	N/A	554	11.7	9.2	13.1	608	11.6	9.1	12.9	670	11.6	8.5	13.0
	All lots	N/A	633	11.6	9.0	13.1	691	11.5	8.1	12.9	750	11.5	8.4	13.0
Heat-damaged Kernels	U.S. No. 1	0.2	79	0.0	0.0	0.0	83	0.0	0.0	0.1	80	0.0	0.0	0.1
	U.S. No. 2	0.2	554	0.0	0.0	0.1	608	0.0	0.0	0.1	670	0.0	0.0	0.2
	All lots	N/A	633	0.0	0.0	0.1	691	0.0	0.0	0.1	750	0.0	0.0	0.2
Damaged Kernels (Total)	U.S. No. 1	2.0	79	0.2	0.0	1.0	83	0.3	0.0	0.9	80	0.2	0.0	1.1
	U.S. No. 2	4.0	554	1.1	0.0	3.1	608	1.2	0.0	2.8	670	1.3	0.0	3.3
	All lots	N/A	633	1.1	0.0	3.1	691	1.2	0.0	2.8	750	1.3	0.0	3.3
Foreign Material	U.S. No. 1	0.4	79	0.1	0.0	0.4	83	0.1	0.0	0.4	80	0.1	0.0	0.3
	U.S. No. 2	0.7	554	0.3	0.0	0.7	608	0.3	0.0	0.7	670	0.2	0.0	0.7
	All lots	N/A	633	0.2	0.0	0.7	691	0.3	0.0	0.7	750	0.2	0.0	0.7
Shrunken and Broken	U.S. No. 1	3.0	79	1.6	1.1	2.4	83	1.8	0.9	2.6	80	1.6	0.5	2.6
	U.S. No. 2	5.0	554	1.9	0.6	2.6	608	1.9	0.6	2.9	670	1.6	0.4	2.8
	All lots	N/A	633	1.9	0.6	2.6	691	1.9	0.6	2.9	750	1.6	0.4	2.8
Total Defects[1]	U.S. No. 1	3.0	79	1.9	1.2	2.9	83	2.3	1.1	3.0	80	1.9	0.7	3.0
	U.S. No. 2	5.0	554	3.3	0.6	5.0	608	3.3	0.7	4.9	670	3.2	0.7	4.9
	All lots	N/A	633	3.2	0.6	5.0	691	3.3	0.7	4.9	750	3.2	0.7	4.9
Dockage	U.S. No. 1	N/A	79	0.4	0.1	0.5	83	0.3	0.1	0.7	80	0.3	0.1	0.4
	U.S. No. 2	N/A	550	0.6	0.1	1.6	608	0.6	0.1	1.4	663	0.6	0.1	1.4
	All lots	N/A	629	0.6	0.1	1.6	691	0.6	0.1	1.4	743	0.6	0.1	1.4
Wheat of Other Classes	U.S. No. 1	3.0	79	0.9	0.0	2.8	83	0.9	0.0	2.6	80	0.6	0.0	2.7
	U.S. No. 2	5.0	554	1.6	0.0	4.5	608	1.6	0.0	4.8	670	1.3	0.0	4.8
	All lots	N/A	633	1.5	0.0	4.5	691	1.6	0.0	4.8	750	1.3	0.0	4.8
Contrasting Classes	U.S. No. 1	1.0	79	0.3	0.0	1.0	83	0.3	0.0	0.8	80	0.4	0.0	1.0
	U.S. No. 2	2.0	554	0.3	0.0	1.4	608	0.2	0.0	1.7	670	0.2	0.0	1.9
	All lots	N/A	633	0.3	0.0	1.4	691	0.2	0.0	1.7	750	0.2	0.0	1.9

continued

Table 2. Summary of export Hard Red Winter wheat quality, 2001-2003--Continued

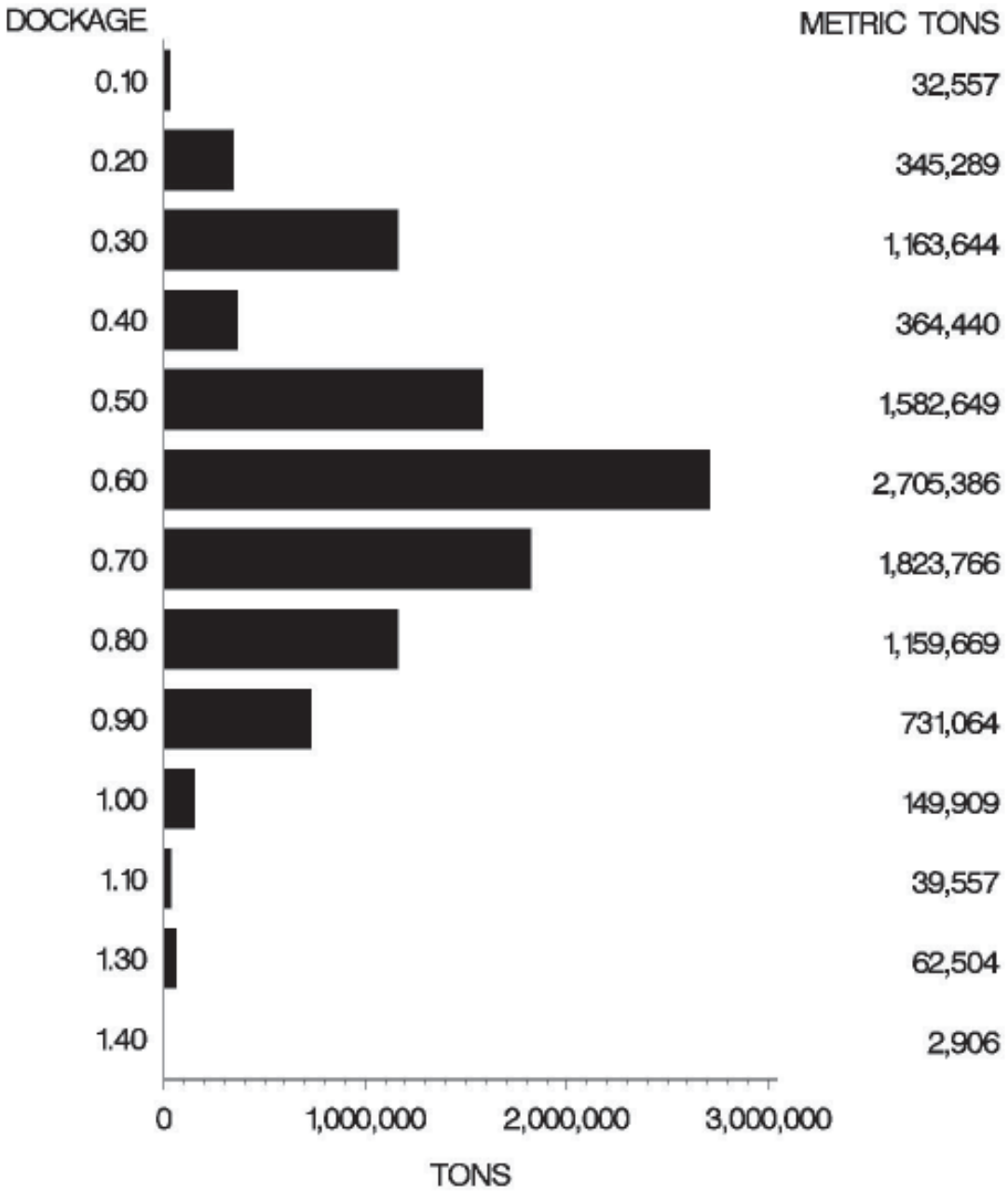
Factor	Grade	Grade Limit	2001 No. of Lots	2001 Avg.	2001 Low	2001 High	2002 No. of Lots	2002 Avg.	2002 Low	2002 High	2003 No. of Lots	2003 Avg.	2003 Low	2003 High
Protein (as is basis)	**U.S. No. 1**	N/A	79	12.5	11.0	13.7	83	13.0	11.7	14.3	80	13.0	11.7	14.1
	U.S. No. 2	N/A	532	11.8	9.8	13.5	594	12.3	10.4	14.3	628	12.0	10.0	14.3
	All lots	N/A	611	11.9	9.8	13.7	677	12.3	10.4	14.3	708	12.1	10.0	14.3
Protein (12% moisture)	**U.S. No. 1**	N/A	79	12.3	11.1	13.2	83	12.8	11.5	13.9	80	12.8	11.5	13.7
	U.S. No. 2	N/A	532	11.8	9.9	13.3	594	12.2	10.3	14.2	628	12.0	10.0	14.0
	All lots	N/A	611	11.8	9.9	13.3	677	12.3	10.3	14.2	708	12.0	10.0	14.0

N/A = Does not apply.
-- = No lots reported in this category.
[1]The sum of the component factor averages may not equal the average for this factor due to rounding.

U.S. WHEAT EXPORTED, 2003

DISTRIBUTION FOR DOCKAGE — ALL GRADES

HRW



U.S. WHEAT EXPORTED, 2003

DISTRIBUTION FOR PROTEIN (12% M) – ALL GRADES

HRW

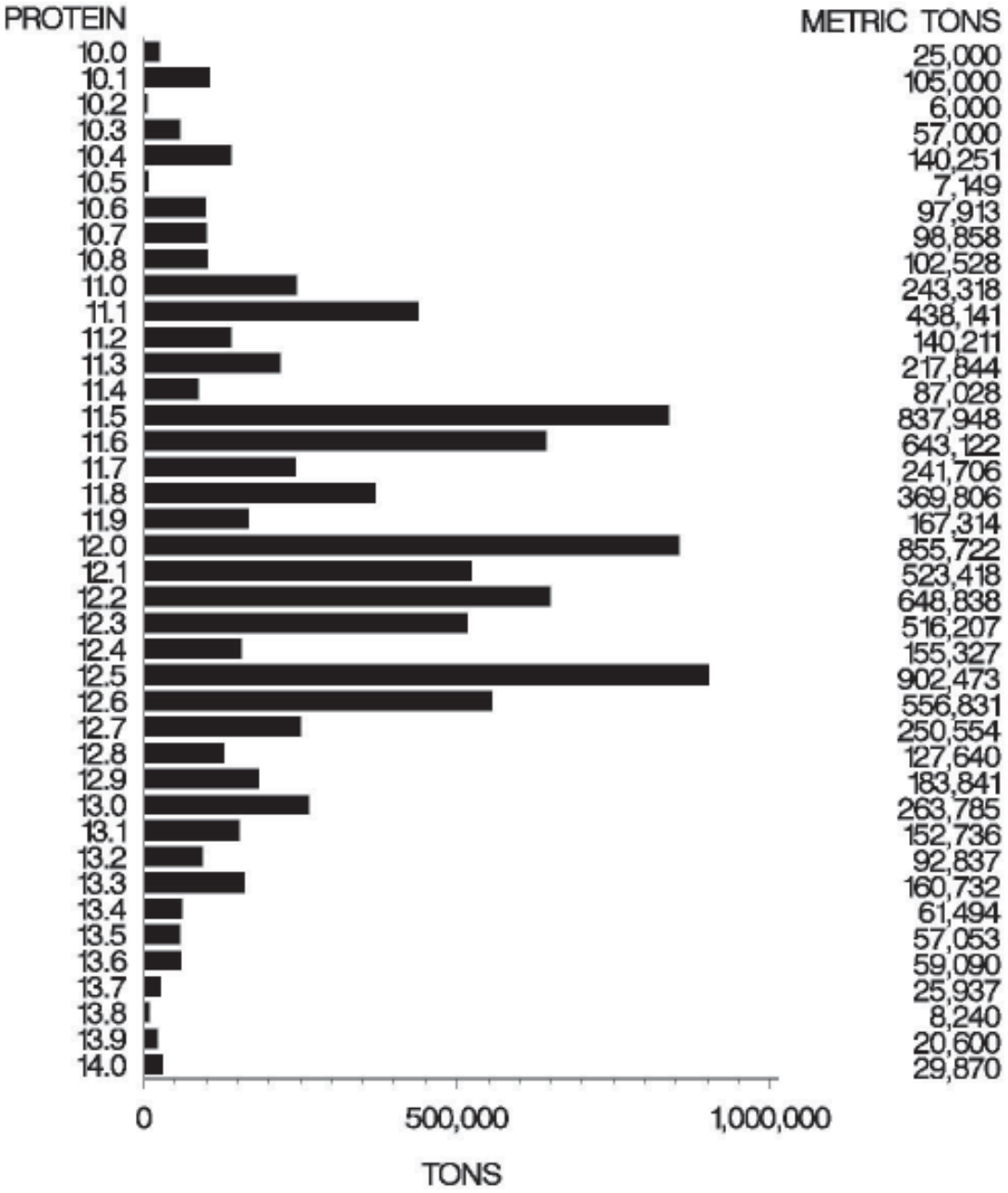


Table 3. Summary of export Hard Red Spring wheat quality, 2001-2003

Factor	Grade	Grade Limit	2001 No. of Lots	2001 Avg.	2001 Low	2001 High	2002 No. of Lots	2002 Avg.	2002 Low	2002 High	2003 No. of Lots	2003 Avg.	2003 Low	2003 High
Test Weight (lb/bu)	**U.S. No. 1**	58.0	125	61.1	59.7	63.3	125	61.0	59.2	63.0	125	61.0	59.1	62.8
	U.S. No. 2	57.0	496	60.9	58.8	63.4	493	60.7	58.5	64.4	480	61.0	58.2	63.2
	U.S. No. 3	55.0	–	–	–	–	–	–	–	–	1	58.6	58.6	58.6
	U.S. No. 4	53.0	–	–	–	–	1	60.4	60.4	60.4	–	–	–	–
	All lots	N/A	621	61.0	58.8	63.4	619	60.8	58.5	64.4	606	61.0	58.2	63.2
Test Weight (kg/hl)	**U.S. No. 1**	N/A	125	80.4	78.6	83.2	125	80.2	77.9	82.8	125	80.2	77.8	82.5
	U.S. No. 2	N/A	496	80.2	77.4	83.3	493	79.9	77.0	84.6	480	80.2	76.6	83.0
	U.S. No. 3	N/A	–	–	–	–	–	–	–	–	1	77.2	77.2	77.2
	U.S. No. 4	N/A	–	–	–	–	1	79.4	79.4	79.4	–	–	–	–
	All lots	N/A	621	80.2	77.4	83.3	619	80.0	77.0	84.6	606	80.2	76.6	83.0
Moisture	**U.S. No. 1**	N/A	125	11.5	9.7	13.0	125	11.7	9.2	13.5	125	11.5	9.1	13.3
	U.S. No. 2	N/A	495	11.8	9.6	13.3	493	12.0	9.5	13.4	480	12.2	9.1	14.0
	U.S. No. 3	N/A	–	–	–	–	–	–	–	–	1	13.2	13.2	13.2
	U.S. No. 4	N/A	–	–	–	–	1	13.4	13.4	13.4	–	–	–	–
	All lots	N/A	620	11.7	9.6	13.3	619	12.0	9.2	13.5	606	12.0	9.1	14.0
Heat-damaged Kernels	**U.S. No. 1**	0.2	125	0.0	0.0	0.0	125	0.0	0.0	0.0	125	0.0	0.0	0.1
	U.S. No. 2	0.2	496	0.0	0.0	0.1	493	0.0	0.0	0.1	480	0.0	0.0	0.1
	U.S. No. 3	0.5	–	–	–	–	–	–	–	–	1	0.0	0.0	0.0
	U.S. No. 4	1.0	–	–	–	–	1	0.0	0.0	0.0	–	–	–	–
	All lots	N/A	621	0.0	0.0	0.1	619	0.0	0.0	0.1	606	0.0	0.0	0.1
Damaged Kernels (Total)	**U.S. No. 1**	2.0	125	0.6	0.0	1.6	125	0.6	0.0	1.4	125	0.5	0.0	1.6
	U.S. No. 2	4.0	496	1.0	0.0	3.8	493	1.0	0.0	3.3	480	1.0	0.0	2.7
	U.S. No. 3	7.0	–	–	–	–	–	–	–	–	1	3.8	3.8	3.8
	U.S. No. 4	10.0	–	–	–	–	1	1.5	1.5	1.5	–	–	–	–
	All lots	N/A	621	0.9	0.0	3.8	619	0.9	0.0	3.3	606	0.9	0.0	3.8
Foreign Material	**U.S. No. 1**	0.4	125	0.2	0.1	0.3	125	0.1	0.0	0.3	125	0.1	0.0	0.4
	U.S. No. 2	0.7	496	0.2	0.0	0.6	493	0.2	0.0	0.5	480	0.1	0.0	0.7
	U.S. No. 3	1.3	–	–	–	–	–	–	–	–	1	0.1	0.1	0.1
	U.S. No. 4	3.0	–	–	–	–	1	0.1	0.1	0.1	–	–	–	–
	All lots	N/A	621	0.2	0.0	0.6	619	0.2	0.0	0.5	606	0.1	0.0	0.7
Shrunken and Broken	**U.S. No. 1**	3.0	125	1.6	1.0	2.4	125	1.6	0.8	2.3	125	1.5	0.8	2.3
	U.S. No. 2	5.0	496	1.6	0.7	2.7	493	1.6	0.9	3.0	480	1.4	0.6	2.7
	U.S. No. 3	8.0	–	–	–	–	–	–	–	–	1	1.4	1.4	1.4
	U.S. No. 4	12.0	–	–	–	–	1	1.3	1.3	1.3	–	–	–	–
	All lots	N/A	621	1.6	0.7	2.7	619	1.6	0.8	3.0	606	1.4	0.6	2.7
Total Defects[1]	**U.S. No. 1**	3.0	125	2.3	1.2	3.0	125	2.4	0.9	3.0	125	2.1	1.0	2.9
	U.S. No. 2	5.0	496	2.7	1.2	5.0	493	2.8	1.4	5.0	480	2.5	1.0	4.9
	U.S. No. 3	8.0	–	–	–	–	–	–	–	–	1	5.3	5.3	5.3
	U.S. No. 4	10.0	–	–	–	–	1	2.9	2.9	2.9	–	–	–	–
	All lots	N/A	621	2.7	1.2	5.0	619	2.7	0.9	5.0	606	2.4	1.0	5.3

continued

Table 3. Summary of export Hard Red Spring wheat quality, 2001-2003--Continued

			2001				2002				2003			
Factor	Grade	Grade Limit	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High
Dockage	**U.S. No. 1**	N/A	125	0.4	0.3	0.7	125	0.4	0.2	0.8	125	0.3	0.2	0.7
	U.S. No. 2	N/A	496	0.5	0.2	1.3	494	0.5	0.1	2.6	480	0.5	0.2	1.4
	U.S. No. 3	N/A	--	--	--	--	--	--	--	--	1	0.9	0.9	0.9
	U.S. No. 4	N/A	--	--	--	--	1	0.8	0.8	0.8	--	--	--	--
	All lots	N/A	621	0.5	0.2	1.3	620	0.5	0.1	2.6	606	0.4	0.2	1.4
Wheat of Other Classes	**U.S. No. 1**	3.0	125	0.6	0.0	2.5	125	0.7	0.0	2.8	125	1.0	0.0	2.9
	U.S. No. 2	5.0	496	1.1	0.0	4.8	493	1.3	0.0	5.0	480	1.4	0.0	5.0
	U.S. No. 3	10.0	--	--	--	--	--	--	--	--	1	0.4	0.4	0.4
	U.S. No. 4	10.0	--	--	--	--	1	3.7	3.7	3.7	--	--	--	--
	All lots	N/A	621	1.0	0.0	4.8	619	1.2	0.0	5.0	606	1.3	0.0	5.0
Contrasting Classes	**U.S. No. 1**	1.0	125	0.3	0.0	0.8	125	0.2	0.0	0.9	125	0.3	0.0	1.0
	U.S. No. 2	2.0	496	0.3	0.0	1.9	493	0.3	0.0	1.5	480	0.3	0.0	1.5
	U.S. No. 3	3.0	--	--	--	--	--	--	--	--	1	0.0	0.0	0.0
	U.S. No. 4	10.0	--	--	--	--	1	0.0	0.0	0.0	--	--	--	--
	All lots	N/A	621	0.3	0.0	1.9	619	0.3	0.0	1.5	606	0.3	0.0	1.5
Protein (as is basis)	**U.S. No. 1**	N/A	123	14.4	13.4	15.3	124	14.5	13.9	15.2	125	14.5	13.9	15.5
	U.S. No. 2	N/A	483	14.1	12.8	15.8	488	14.4	12.4	16.2	478	14.2	12.6	16.4
	U.S. No. 3	N/A	--	--	--	--	--	--	--	--	1	13.0	13.0	13.0
	U.S. No. 4	N/A	--	--	--	--	1	14.2	14.2	14.2	--	--	--	--
	All lots	N/A	616	14.2	12.8	15.8	613	14.5	12.4	16.2	604	14.3	12.6	16.4
Protein (12% moisture)	**U.S. No. 1**	N/A	123	14.3	13.5	15.3	124	14.5	14.0	15.3	125	14.4	14.0	15.3
	U.S. No. 2	N/A	493	14.1	12.9	15.4	488	14.4	12.5	16.3	478	14.3	12.7	16.5
	U.S. No. 3	N/A	--	--	--	--	--	--	--	--	1	13.2	13.2	13.2
	U.S. No. 4	N/A	--	--	--	--	1	14.4	14.4	14.4	--	--	--	--
	All lots	N/A	616	14.1	12.9	15.4	613	14.4	12.5	16.3	604	14.3	12.7	16.5

N/A = Does not apply.

[1]The sum of the component factor averages may not equal the average for this factor due to rounding.

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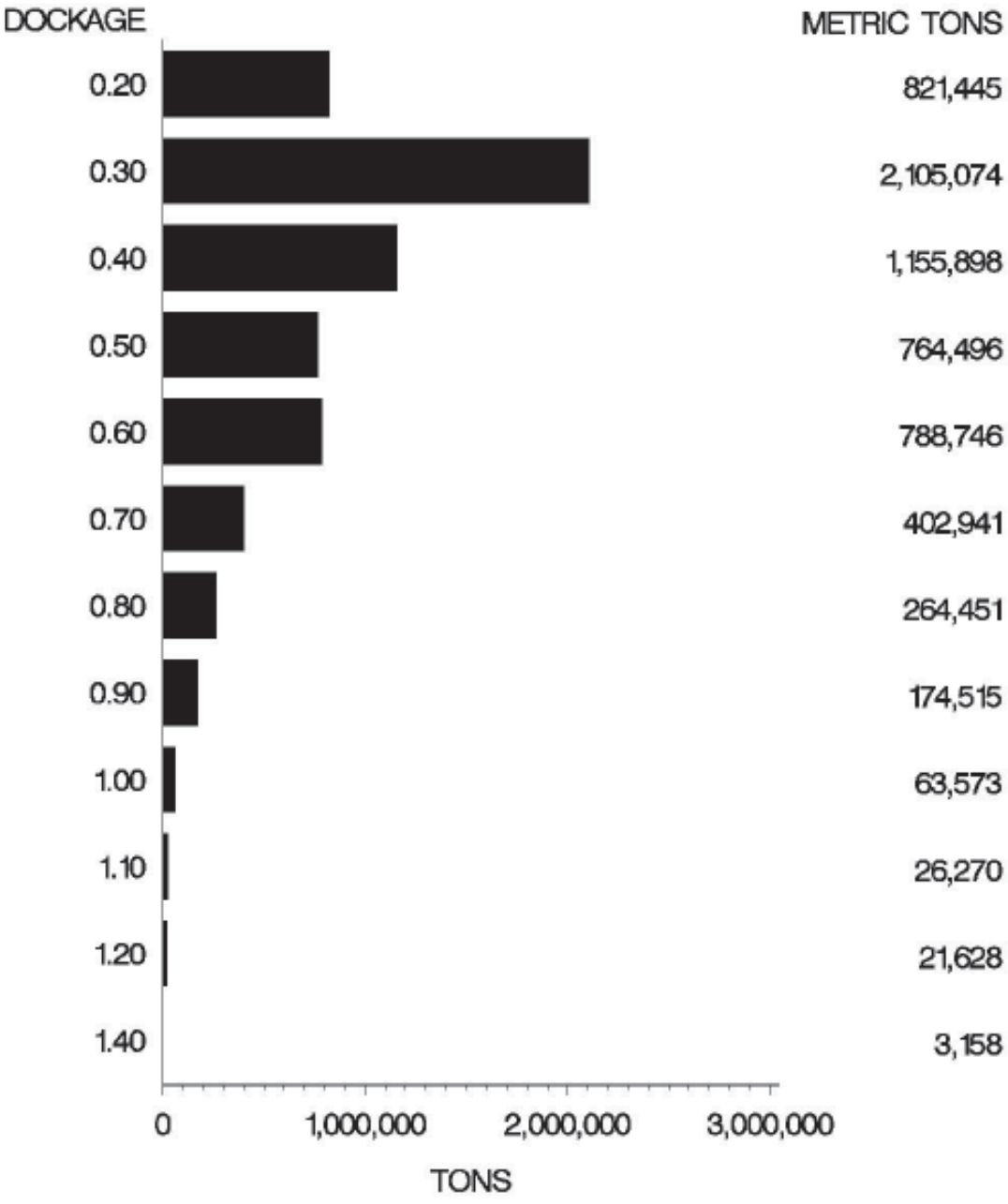
DISTRIBUTION FOR DOCKAGE — ALL GRADES

HRS



U.S. WHEAT EXPORTED, 2003

DISTRIBUTION FOR PROTEIN (12% M) – ALL GRADES

HRS

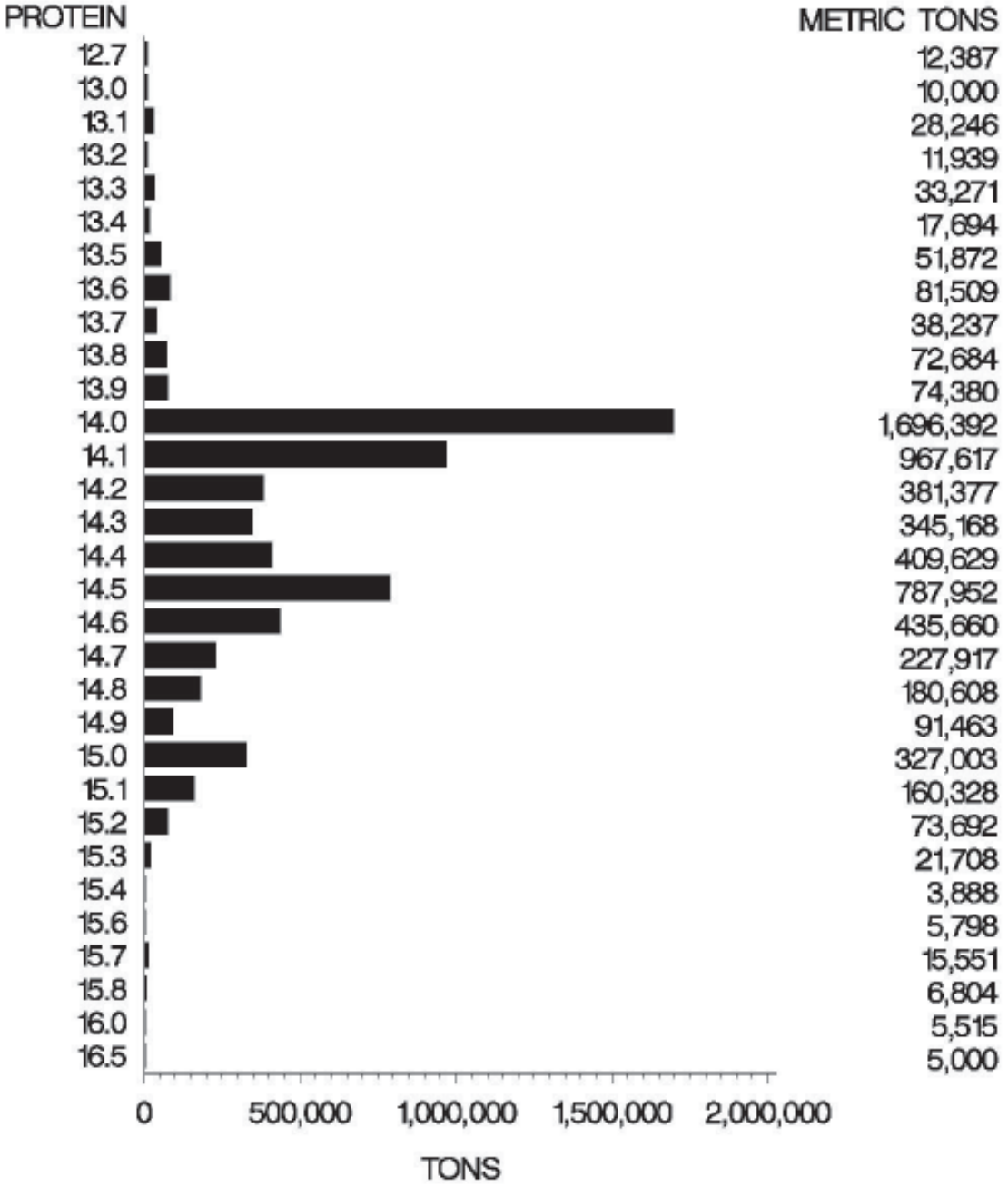


Table 4. Summary of export Soft Red Winter wheat quality, factor averages by grade, 2001-2003

			2001				2002				2003			
Factor	Grade	Grade Limit	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High
Test Weight (lb/bu)	**U.S. No. 1**	60.0	5	60.1	60.0	60.3	1	60.3	60.3	60.3	–	–	–	–
	U.S. No. 2	58.0	373	59.6	58.0	62.8	315	59.4	58.0	62.0	282	59.3	58.1	61.4
	U.S. No. 3	56.0	4	58.1	57.3	59.8	1	59.9	59.9	59.9	5	59.4	56.7	59.7
	U.S. Sample Grade		–	–	–	–	–	–	–	–	1	58.9	58.9	58.9
	All lots	N/A	382	59.6	57.3	62.8	317	59.4	58.0	62.0	288	59.3	56.7	61.4
Test Weight (kg/hl)	**U.S. No. 1**	N/A	5	79.0	78.9	79.3	1	79.3	79.3	79.3	–	–	–	–
	U.S. No. 2	N/A	373	78.4	76.4	82.6	315	78.1	76.4	81.5	282	78.0	76.4	80.7
	U.S. No. 3	N/A	4	76.4	75.5	78.7	1	78.8	78.8	78.8	5	78.1	74.7	78.6
	U.S. Sample Grade		–	–	–	–	–	–	–	–	1	77.5	77.5	77.5
	All lots	N/A	382	78.4	75.5	82.6	317	78.1	76.4	81.5	288	78.0	74.7	80.7
Moisture	**U.S. No. 1**	N/A	5	12.8	12.7	13.3	1	12.5	12.5	12.5	–	–	–	–
	U.S. No. 2	N/A	373	12.8	10.4	13.5	315	12.8	11.9	13.5	282	13.0	12.0	13.5
	U.S. No. 3	N/A	4	12.7	12.3	13.3	1	12.8	12.8	12.8	5	12.9	11.8	13.0
	U.S. Sample Grade		–	–	–	–	–	–	–	–	1	12.6	12.6	12.6
	All lots	N/A	382	12.8	10.4	13.5	317	12.8	11.9	13.5	288	13.0	11.8	13.5
Heat-damaged Kernels	**U.S. No. 1**	0.2	5	0.0	0.0	0.0	1	0.0	0.0	0.0	–	–	–	–
	U.S. No. 2	0.2	373	0.0	0.0	0.1	315	0.0	0.0	0.2	282	0.0	0.0	0.2
	U.S. No. 3	0.5	4	0.0	0.0	0.0	1	0.0	0.0	0.0	5	0.0	0.0	0.0
	U.S. Sample Grade		–	–	–	–	–	–	–	–	1	0.0	0.0	0.0
	All lots	N/A	382	0.0	0.0	0.1	317	0.0	0.0	0.2	288	0.0	0.0	0.2
Damaged Kernels (Total)	**U.S. No. 1**	2.0	5	0.9	0.5	1.3	1	1.6	1.6	1.6	–	–	–	–
	U.S. No. 2	4.0	373	2.1	0.2	3.8	315	2.0	0.4	3.8	282	2.4	0.4	4.0
	U.S. No. 3	7.0	4	2.2	1.3	2.9	1	1.1	1.1	1.1	5	4.9	0.8	5.6
	U.S. Sample Grade		–	–	–	–	–	–	–	–	1	38.2	38.2	38.2
	All lots	N/A	382	2.1	0.2	3.8	317	2.0	0.4	3.8	288	2.6	0.4	38.2
Foreign Material	**U.S. No. 1**	0.4	5	0.2	0.1	0.2	1	0.2	0.2	0.2	–	–	–	–
	U.S. No. 2	0.7	373	0.1	0.0	0.5	315	0.1	0.0	0.6	282	0.2	0.0	0.6
	U.S. No. 3	1.3	4	0.2	0.1	0.5	1	0.1	0.1	0.1	5	0.1	0.1	0.2
	U.S. Sample Grade		–	–	–	–	–	–	–	–	1	0.3	0.3	0.3
	All lots	N/A	382	0.1	0.0	0.5	317	0.1	0.0	0.6	288	0.1	0.0	0.6
Shrunken and Broken	**U.S. No. 1**	3.0	5	0.6	0.5	0.6	1	0.5	0.5	0.5	–	–	–	–
	U.S. No. 2	5.0	373	0.8	0.3	1.4	315	0.9	0.3	1.9	282	0.9	0.4	2.0
	U.S. No. 3	8.0	4	0.8	0.6	1.1	1	0.7	0.7	0.7	5	0.8	0.7	2.1
	U.S. Sample Grade		–	–	–	–	–	–	–	–	1	1.7	1.7	1.7
	All lots	N/A	382	0.8	0.3	1.4	317	0.9	0.3	1.9	288	0.9	0.4	2.1

continued

Table 4. Summary of export Soft Red Winter wheat quality, factor averages by grade, 2001-2003--Continued

Factor	Grade	Grade Limit	2001 No. of Lots	2001 Avg.	2001 Low	2001 High	2002 No. of Lots	2002 Avg.	2002 Low	2002 High	2003 No. of Lots	2003 Avg.	2003 Low	2003 High
Total Defects[1]	**U.S. No. 1**	3.0	5	1.6	1.2	2.1	1	2.3	2.3	2.3	–	–	–	–
	U.S. No. 2	5.0	373	3.0	1.0	4.6	315	3.1	1.1	4.8	282	3.5	1.2	5.0
	U.S. No. 3	8.0	4	3.2	2.1	4.0	1	1.9	1.9	1.9	5	5.8	2.6	6.4
	U.S. Sample Grade		–	–	–	–	–	–	–	–	1	40.2	40.2	40.2
	All lots	N/A	382	3.0	1.0	4.6	317	3.1	1.1	4.8	288	3.6	1.2	40.2
Dockage	**U.S. No. 1**	N/A	5	0.8	0.5	0.9	1	0.6	0.6	0.6	–	–	–	–
	U.S. No. 2	N/A	369	0.7	0.3	1.0	310	0.7	0.3	1.4	277	0.7	0.4	1.5
	U.S. No. 3	N/A	4	0.7	0.5	0.8	1	0.6	0.6	0.6	4	0.8	0.7	1.9
	U.S. Sample Grade		–	–	–	–	–	–	–	–	1	0.8	0.8	0.8
	All lots	N/A	378	0.7	0.3	1.0	312	0.7	0.3	1.4	282	0.7	0.4	1.9
Wheat of Other Classes	**U.S. No. 1**	3.0	5	0.2	0.0	1.2	1	0.0	0.0	0.0	–	–	–	–
	U.S. No. 2	5.0	373	0.7	0.0	4.4	315	0.5	0.0	4.0	282	0.6	0.0	4.8
	U.S. No. 3	10.0	4	0.1	0.0	0.4	1	1.5	1.5	1.5	5	0.3	0.0	1.0
	U.S. Sample Grade		–	–	–	–	–	–	–	–	1	1.1	1.1	1.1
	All lots	N/A	382	0.7	0.0	4.4	317	0.5	0.0	4.0	288	0.6	0.0	4.8
Contrasting Classes	**U.S. No. 1**	1.0	5	0.0	0.0	0.0	1	0.0	0.0	0.0	–	–	–	–
	U.S. No. 2	2.0	373	0.1	0.0	1.7	315	0.0	0.0	0.7	282	0.0	0.0	0.4
	U.S. No. 3	3.0	4	0.0	0.0	0.0	1	0.0	0.0	0.0	5	0.0	0.0	0.0
	U.S. Sample Grade		–	–	–	–	–	–	–	–	1	0.1	0.1	0.1
	All lots	N/A	382	0.1	0.0	1.7	317	0.0	0.0	0.7	288	0.0	0.0	0.4
Protein (as is basis)	**U.S. No. 1**	N/A	4	10.2	10.1	10.4	1	11.0	11.0	11.0	–	–	–	–
	U.S. No. 2	N/A	300	10.2	9.5	13.0	265	10.3	9.4	12.9	256	10.1	9.3	11.3
	U.S. No. 3	N/A	3	10.0	9.4	10.2	–	–	–	–	1	10.1	10.1	10.1
	U.S. Sample Grade		–	–	–	–	–	–	–	–	–	–	–	–
	All lots	N/A	307	10.2	9.4	13.0	266	10.3	9.4	12.9	257	10.1	9.3	11.3
Protein (12% moisture)	**U.S. No. 1**	N/A	4	10.3	10.2	10.5	1	11.1	11.1	11.1	–	–	–	–
	U.S. No. 2	N/A	300	10.3	9.6	13.2	265	10.4	9.5	13.0	256	10.2	9.5	11.3
	U.S. No. 3	N/A	3	10.1	9.5	10.3	–	–	–	–	1	10.2	10.2	10.2
	U.S. Sample Grade		–	–	–	–	–	–	–	–	–	–	–	–
	All lots	N/A	307	10.3	9.5	13.2	266	10.4	9.5	13.0	257	10.2	9.5	11.3

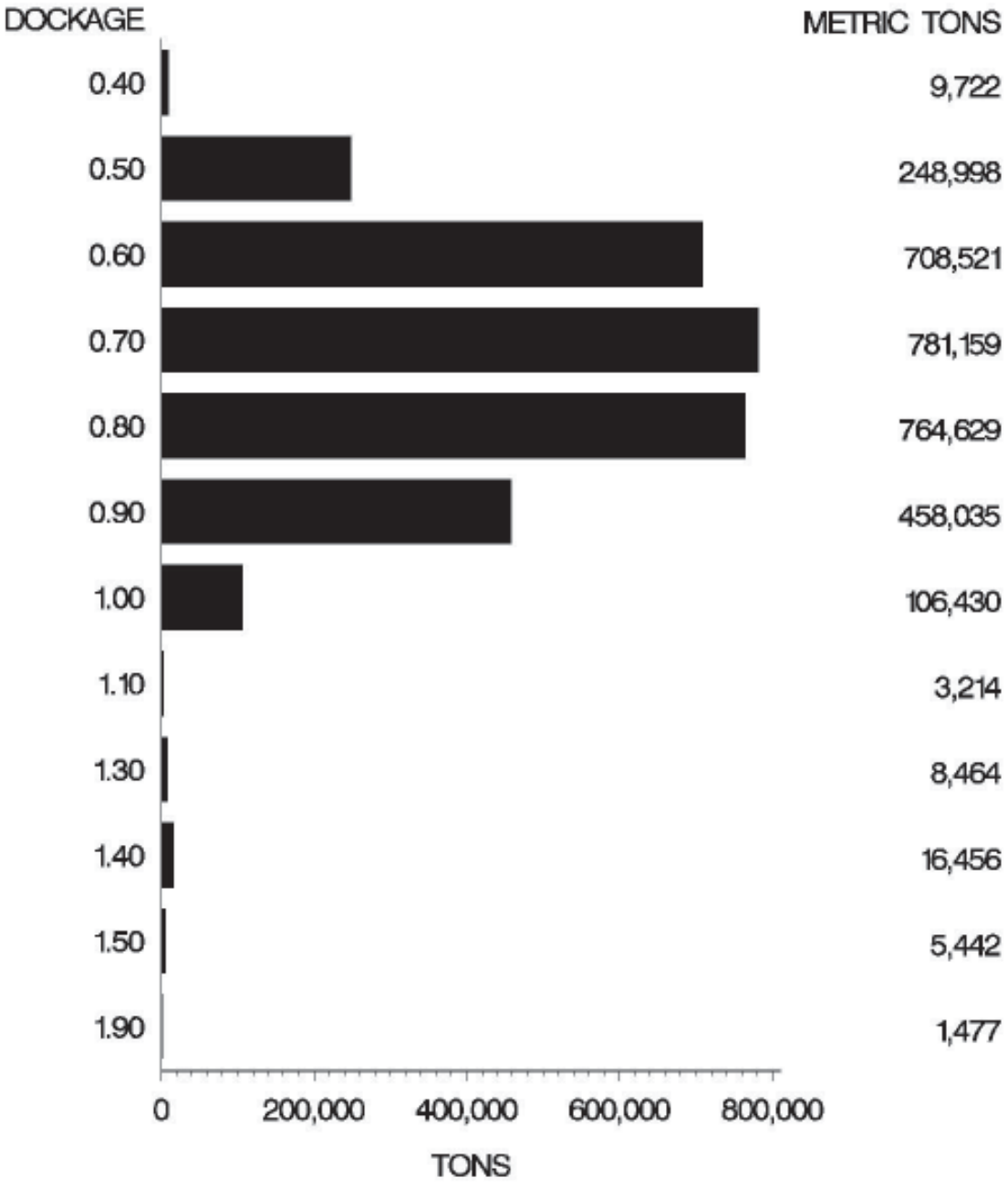
[1] The sum of the component factor averages may not equal the average for this factor due to rounding.

N/A = Does not apply.
-- = No lots reported in this category.

U.S. WHEAT EXPORTED, 2003

DISTRIBUTION FOR DOCKAGE — ALL GRADES

SRW



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DISTRIBUTION FOR PROTEIN (12% M) – ALL GRADES

SRW

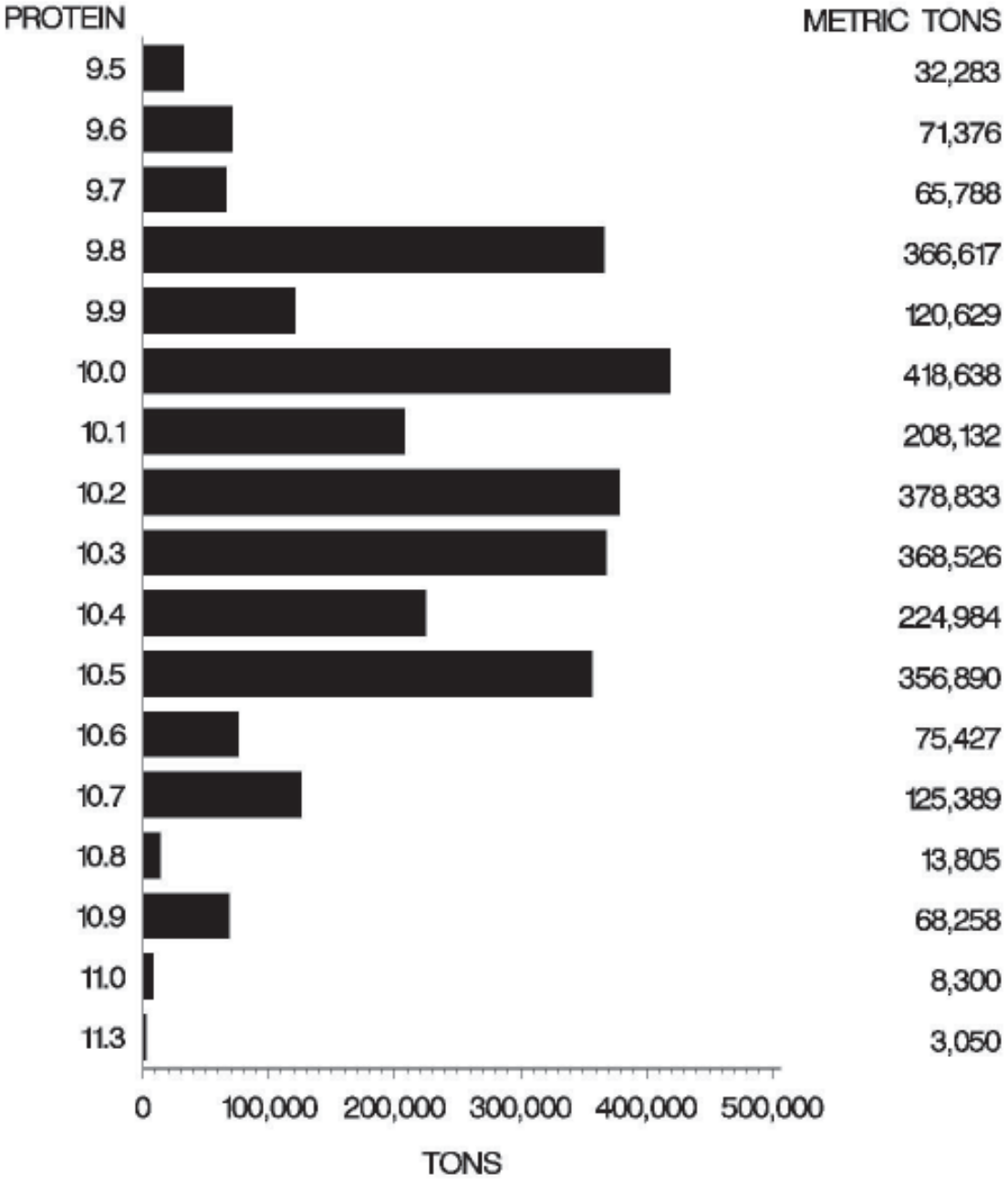

Table 5. Summary of export Durum wheat quality, factor averages by grade, 2001-2003

Factor	Grade	Grade Limit	2001 No. of Lots	2001 Avg.	2001 Low	2001 High	2002 No. of Lots	2002 Avg.	2002 Low	2002 High	2003 No. of Lots	2003 Avg.	2003 Low	2003 High
Test Weight (lb/bu)	**U.S. No. 1**	60.0	21	62.3	61.2	63.6	38	62.5	60.3	63.7	38	62.6	60.3	64.5
	U.S. No. 2	58.0	39	60.9	59.9	63.3	50	60.7	59.7	63.4	54	60.7	59.8	63.1
	U.S. No. 3	56.0	13	60.0	59.0	60.3	2	60.2	59.3	60.3	2	60.1	60.0	60.1
	U.S. No. 4	54.0	1	59.4	59.4	59.4	1	58.6	58.6	58.6	–	–	–	–
	U.S. No. 5		28	58.5	57.7	59.5	4	58.0	57.9	58.5	3	58.6	58.4	58.9
	U.S. Sample Grade	N/A	17	58.6	56.5	60.5	3	58.1	58.0	59.3	4	58.4	58.0	58.5
	All lots	N/A	119	59.9	56.5	63.6	98	61.0	57.9	63.7	101	61.2	58.0	64.5
Test Weight (kg/hl)	**U.S. No. 1**	N/A	21	81.1	79.7	82.7	38	81.4	78.5	83.0	38	81.6	78.5	83.9
	U.S. No. 2	N/A	39	79.4	78.0	82.4	50	79.0	77.7	82.5	54	79.1	77.8	82.1
	U.S. No. 3	N/A	13	78.1	76.8	78.6	2	78.4	77.2	78.6	2	78.2	78.2	78.2
	U.S. No. 4	N/A	1	77.3	77.3	77.3	1	76.3	76.3	76.3	–	–	–	–
	U.S. No. 5		28	76.2	75.1	77.4	4	75.5	75.4	76.3	3	76.4	76.1	76.7
	U.S. Sample Grade	N/A	17	76.3	73.6	78.7	3	75.7	75.6	77.2	4	76.1	75.5	76.2
	All lots	N/A	119	78.0	73.6	82.7	98	79.4	75.4	83.0	101	79.7	75.5	83.9
Moisture	**U.S. No. 1**	N/A	20	7.5	6.4	12.2	38	7.2	6.0	14.5	38	7.8	6.2	12.2
	U.S. No. 2	N/A	39	11.7	6.7	12.7	50	11.7	9.9	12.4	54	11.9	6.9	12.9
	U.S. No. 3	N/A	13	12.3	11.9	12.6	2	11.2	11.1	12.2	2	10.9	10.5	12.6
	U.S. No. 4	N/A	1	12.6	12.6	12.6	1	12.4	12.4	12.4	–	–	–	–
	U.S. No. 5		28	12.4	12.0	12.8	4	12.2	12.0	12.3	3	12.5	12.2	12.7
	U.S. Sample Grade	N/A	17	12.4	12.0	12.7	3	12.2	12.1	12.3	4	12.6	12.5	12.7
	All lots	N/A	118	11.5	6.4	12.8	98	10.1	6.0	14.5	101	10.4	6.2	12.9
Heat-damaged Kernels	**U.S. No. 1**	0.2	21	0.0	0.0	0.0	38	0.0	0.0	0.1	38	0.0	0.0	0.0
	U.S. No. 2	0.2	39	0.0	0.0	0.0	50	0.0	0.0	0.0	54	0.0	0.0	0.0
	U.S. No. 3	0.5	13	0.0	0.0	0.0	2	0.0	0.0	0.0	2	0.0	0.0	0.0
	U.S. No. 4	1.0	1	0.0	0.0	0.0	1	0.0	0.0	0.0	–	–	–	–
	U.S. No. 5		28	0.0	0.0	0.0	4	0.0	0.0	0.0	3	0.0	0.0	0.0
	U.S. Sample Grade	N/A	17	0.0	0.0	0.2	3	0.0	0.0	0.0	4	0.0	0.0	0.0
	All lots	N/A	119	0.0	0.0	0.2	98	0.0	0.0	0.1	101	0.0	0.0	0.0
Damaged Kernels (Total)	**U.S. No. 1**	2.0	21	0.9	0.2	1.3	38	0.8	0.2	1.5	38	0.7	0.2	1.4
	U.S. No. 2	4.0	39	2.3	0.0	3.6	50	2.3	0.4	3.1	54	2.3	0.4	3.4
	U.S. No. 3	7.0	13	5.6	4.7	6.1	2	5.0	4.1	5.1	2	4.2	4.2	4.3
	U.S. No. 4	10.0	1	9.2	9.2	9.2	1	6.7	6.7	6.7	–	–	–	–
	U.S. No. 5		28	11.0	8.2	13.0	4	11.0	8.9	12.8	3	10.9	9.7	12.3
	U.S. Sample Grade	N/A	17	15.1	5.4	19.2	3	10.9	10.6	15.4	4	14.4	13.0	15.0
	All lots	N/A	119	7.2	0.0	19.2	98	2.9	0.2	15.4	101	3.0	0.2	15.0

N/A = Does not apply.
-- = No lots reported in this category.

continued

Table 5. Summary of export Durum wheat quality, factor averages by grade, 2001-2003--Continued

			2001				2002				2003			
Factor	Grade	Grade Limit	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High
Foreign Material	U.S. No. 1	0.4	21	0.2	0.1	0.3	38	0.2	0.1	0.4	38	0.2	0.1	0.3
	U.S. No. 2	0.7	39	0.2	0.1	0.5	50	0.2	0.1	0.6	54	0.2	0.0	0.4
	U.S. No. 3	1.3	13	0.3	0.2	0.5	2	0.2	0.2	0.2	2	0.3	0.3	0.4
	U.S. No. 4	3.0	1	0.3	0.3	0.3	1	0.5	0.5	0.5	--	--	--	--
	U.S. No. 5		28	0.4	0.2	0.7	4	0.5	0.3	0.8	3	0.5	0.3	0.6
	U.S. Sample Grade	N/A	17	0.4	0.2	0.7	3	0.4	0.3	0.5	4	0.5	0.3	0.6
	All lots	N/A	119	0.3	0.1	0.7	98	0.2	0.1	0.8	101	0.2	0.0	0.6
Shrunken and Broken	U.S. No. 1	3.0	21	0.7	0.5	1.7	38	0.7	0.3	1.9	38	0.6	0.2	1.9
	U.S. No. 2	5.0	39	1.5	0.4	2.0	50	1.8	0.4	2.2	54	1.6	0.7	2.0
	U.S. No. 3	8.0	13	1.7	1.4	2.0	2	1.6	1.6	2.1	2	1.5	1.2	1.6
	U.S. No. 4	12.0	1	2.0	2.0	2.0	1	2.4	2.4	2.4	--	--	--	--
	U.S. No. 5		28	2.2	1.9	2.7	4	2.4	2.3	3.1	3	2.2	1.9	2.5
	U.S. Sample Grade	N/A	17	2.3	1.2	2.6	3	2.7	2.4	2.9	4	2.2	2.0	2.4
	All lots	N/A	119	1.8	0.4	2.7	98	1.5	0.3	3.1	101	1.3	0.2	2.5
Total Defects[1]	U.S. No. 1	3.0	21	1.8	0.9	2.9	38	1.6	0.8	2.9	38	1.5	0.6	2.9
	U.S. No. 2	5.0	39	4.0	1.3	5.0	50	4.3	1.0	5.0	54	4.1	1.6	5.0
	U.S. No. 3	8.0	13	7.6	6.4	8.0	2	6.9	6.4	6.9	2	6.1	5.9	6.1
	U.S. No. 4	12.0	1	11.5	11.5	11.5	1	9.6	9.6	9.6	--	--	--	--
	U.S. No. 5		28	13.6	10.5	15.2	4	13.9	12.5	16.7	3	13.6	12.8	14.5
	U.S. Sample Grade	N/A	17	17.8	7.0	21.5	3	14.0	13.7	18.3	4	17.1	15.5	18.0
	All lots	N/A	119	9.2	0.9	21.5	98	4.6	0.8	18.3	101	4.5	0.6	18.0
Dockage	U.S. No. 1	N/A	22	0.5	0.1	0.7	38	0.5	0.3	0.9	38	0.5	0.2	0.7
	U.S. No. 2	N/A	37	0.7	0.3	1.2	48	0.7	0.1	1.2	54	0.6	0.3	1.0
	U.S. No. 3	N/A	13	0.6	0.6	0.7	2	0.8	0.8	0.8	2	0.7	0.7	0.8
	U.S. No. 4	N/A	1	0.7	0.7	0.7	1	0.7	0.7	0.7	--	--	--	--
	U.S. No. 5		27	0.8	0.6	1.0	4	0.9	0.9	0.9	3	0.8	0.6	1.0
	U.S. Sample Grade	N/A	17	0.8	0.5	1.6	3	1.0	0.9	1.0	4	1.0	0.9	1.2
	All lots	N/A	117	0.7	0.1	1.6	96	0.6	0.1	1.2	101	0.6	0.2	1.2
Contrasting Classes	U.S. No. 1	1.0	21	0.1	0.0	0.9	38	0.2	0.0	0.8	38	0.2	0.0	0.8
	U.S. No. 2	2.0	39	0.9	0.0	1.9	50	0.9	0.1	2.0	54	0.9	0.0	1.9
	U.S. No. 3	3.0	13	0.9	0.0	2.2	2	0.9	0.9	1.0	2	0.4	0.0	0.5
	U.S. No. 4	10.0	1	1.1	1.1	1.1	1	1.0	1.0	1.0	--	--	--	--
	U.S. No. 5		28	1.6	0.5	5.9	4	1.3	0.8	1.4	3	1.0	0.7	1.7
	U.S. Sample Grade	N/A	17	2.1	0.2	6.9	3	1.5	0.8	1.7	4	1.3	1.0	1.8
	All lots	N/A	119	1.1	0.0	6.9	98	0.7	0.0	2.0	101	0.7	0.0	1.9

N/A = Does not apply.

-- = No lots reported in this category.

continued

Table 5. Summary of export Durum wheat quality, factor averages by grade, 2001-2003--Continued

Factor	Grade	Grade Limit	2001 No. of Lots	2001 Avg.	2001 Low	2001 High	2002 No. of Lots	2002 Avg.	2002 Low	2002 High	2003 No. of Lots	2003 Avg.	2003 Low	2003 High
Protein (as is basis)	**U.S. No. 1**	N/A	14	14.9	12.8	16.0	33	14.0	12.0	15.1	28	13.9	11.7	15.1
	U.S. No. 2	N/A	16	14.1	13.4	15.6	14	13.9	13.3	14.3	32	14.1	13.0	15.0
	U.S. No. 3	N/A	2	14.1	14.1	14.2	1	14.1	14.1	14.1	1	14.0	14.0	14.0
	U.S. No. 4	N/A	1	14.2	14.2	14.2	1	14.1	14.1	14.1	–	–	–	–
	U.S. No. 5		13	14.2	14.1	14.5	–	–	–	–	1	13.7	13.7	13.7
	U.S. Sample Grade	N/A	3	14.6	14.2	14.8	–	–	–	–	1	13.7	13.7	13.7
	All lots	N/A	49	14.4	12.8	16.0	49	13.9	12.0	15.1	63	14.0	11.7	15.1
Protein (12% moisture)	**U.S. No. 1**	N/A	14	13.9	12.1	14.4	33	13.2	11.4	14.5	28	13.2	11.1	15.0
	U.S. No. 2	N/A	16	14.0	13.0	15.3	14	13.9	13.1	14.2	32	14.1	12.4	14.9
	U.S. No. 3	N/A	2	14.2	14.2	14.2	1	14.1	14.1	14.1	1	14.1	14.1	14.1
	U.S. No. 4	N/A	1	14.3	14.3	14.3	1	14.2	14.2	14.2	–	–	–	–
	U.S. No. 5		13	14.3	14.2	14.5	–	–	–	–	1	13.8	13.8	13.8
	U.S. Sample Grade	N/A	3	14.7	14.3	14.9	–	–	–	–	1	13.8	13.8	13.8
	All lots	N/A	49	14.1	12.1	15.3	49	13.4	11.4	14.5	63	13.7	11.1	15.0

[1] The sum of the component factor averages may not equal the average for this factor due to rounding.

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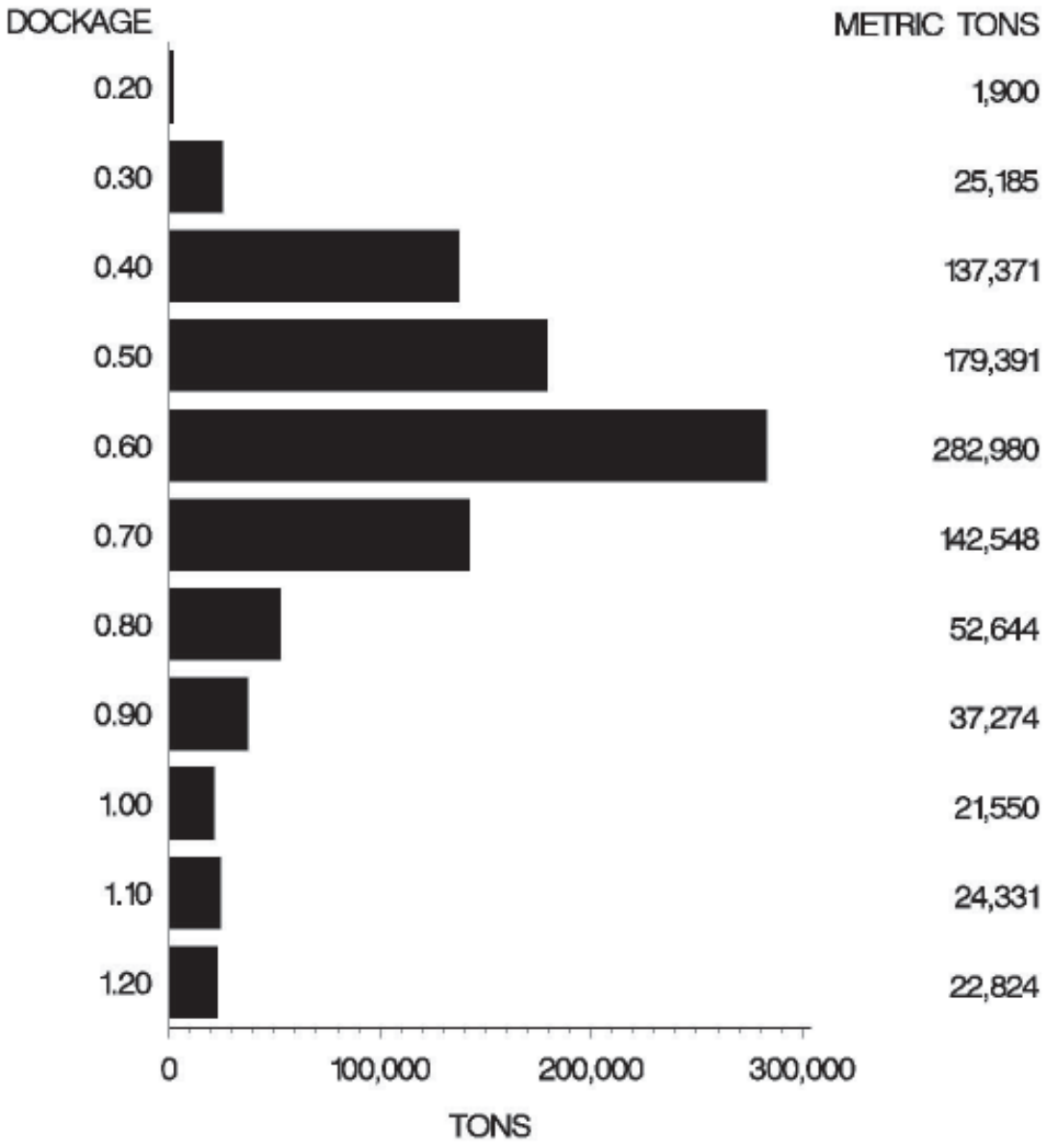
DISTRIBUTION FOR DOCKAGE — ALL GRADES

DU



U.S. WHEAT EXPORTED, 2003

DISTRIBUTION FOR PROTEIN (12% M) – ALL GRADES

DU

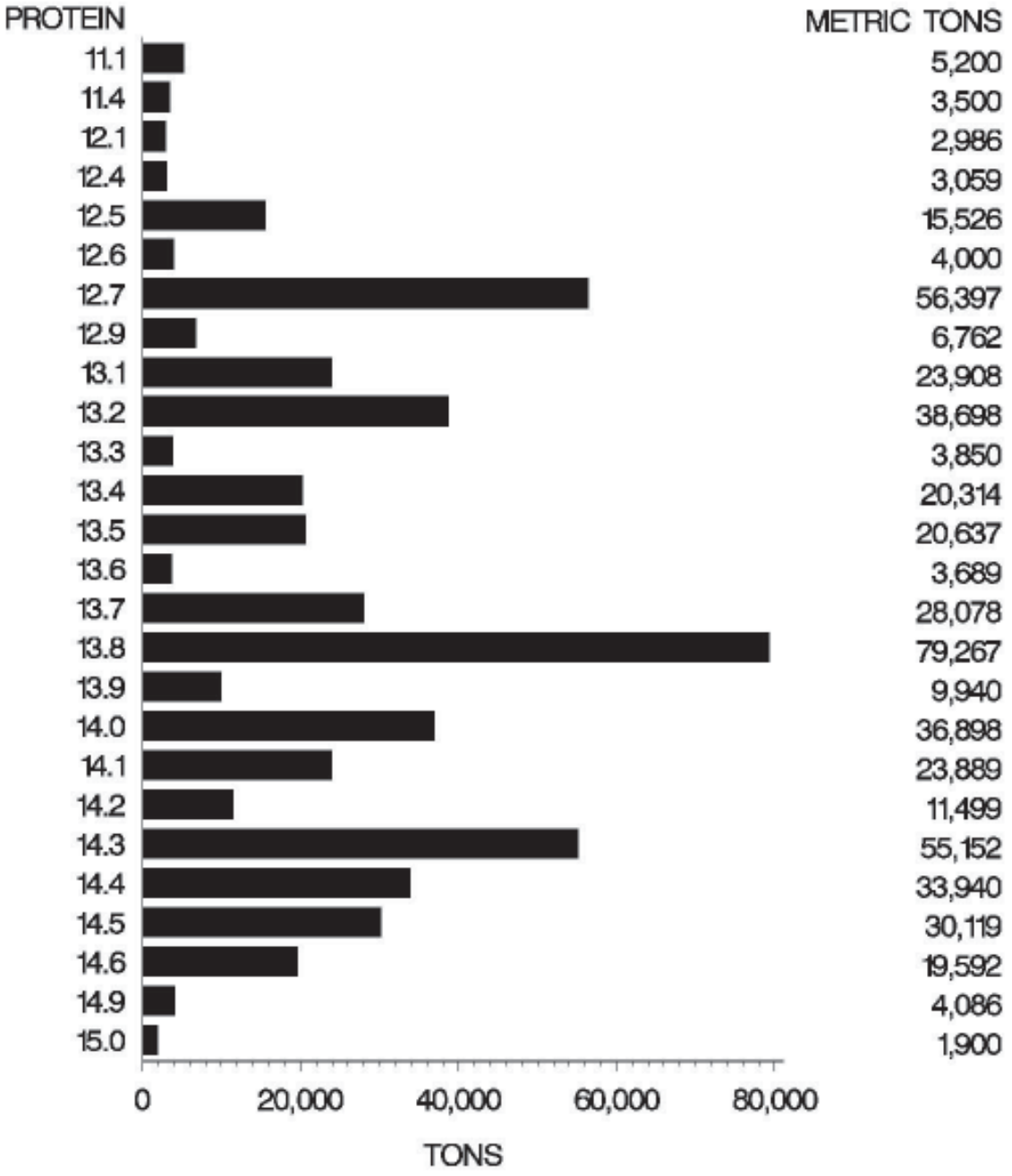


Table 6. Summary of export Soft White wheat quality, factor averages by grade, 2001-2003

			2001				2002				2003			
Factor	Grade	Grade Limit	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High
Test Weight (lb/bu)	**U.S. No. 1**	60.0	159	62.0	60.4	65.0	174	61.7	60.3	63.0	177	61.5	60.2	63.2
	U.S. No. 2	58.0	249	61.8	59.5	63.3	207	61.5	59.6	63.2	180	61.0	58.4	62.8
	All lots	N/A	408	61.8	59.5	65.0	381	61.5	59.6	63.2	357	61.1	58.4	63.2
Test Weight (kg/hl)	**U.S. No. 1**	N/A	159	81.5	79.5	85.4	174	81.2	79.3	82.8	177	80.9	79.2	83.1
	U.S. No. 2	N/A	249	81.3	78.3	83.2	207	80.9	78.4	83.1	180	80.2	76.9	82.6
	All lots	N/A	408	81.3	78.3	85.4	381	80.9	78.4	83.1	357	80.3	76.9	83.1
Moisture	**U.S. No. 1**	N/A	159	9.7	8.8	12.4	174	10.0	8.7	11.8	177	9.9	8.3	12.1
	U.S. No. 2	N/A	249	9.7	8.6	12.7	207	9.8	8.8	10.9	180	9.5	8.2	10.4
	All lots	N/A	408	9.7	8.6	12.7	381	9.8	8.7	11.8	357	9.6	8.2	12.1
Heat-damaged Kernels	**U.S. No. 1**	0.2	159	0.0	0.0	0.0	174	0.0	0.0	0.1	177	0.0	0.0	0.0
	U.S. No. 2	0.2	249	0.0	0.0	0.0	207	0.0	0.0	0.1	180	0.0	0.0	0.0
	All lots	N/A	408	0.0	0.0	0.0	381	0.0	0.0	0.1	357	0.0	0.0	0.0
Damaged Kernels (Total)	**U.S. No. 1**	2.0	159	0.1	0.0	1.0	174	0.2	0.0	1.3	177	0.1	0.0	0.9
	U.S. No. 2	4.0	249	0.2	0.0	1.8	207	0.1	0.0	0.5	180	0.2	0.0	1.4
	All lots	N/A	408	0.2	0.0	1.8	381	0.1	0.0	1.3	357	0.1	0.0	1.4
Foreign Material	**U.S. No. 1**	0.4	159	0.2	0.0	0.4	174	0.1	0.0	0.4	177	0.1	0.0	0.4
	U.S. No. 2	0.7	249	0.2	0.0	0.6	207	0.2	0.0	0.5	180	0.1	0.0	0.4
	All lots	N/A	408	0.2	0.0	0.6	381	0.2	0.0	0.5	357	0.1	0.0	0.4
Shrunken and Broken	**U.S. No. 1**	3.0	159	1.0	0.4	2.3	174	1.1	0.5	1.8	177	1.1	0.3	1.7
	U.S. No. 2	5.0	249	1.0	0.5	2.1	207	1.2	0.8	1.8	180	1.2	0.8	1.6
	All lots	N/A	408	1.0	0.4	2.3	381	1.2	0.5	1.8	357	1.2	0.3	1.7
Total Defects[1]	**U.S. No. 1**	3.0	159	1.3	0.6	2.5	174	1.4	0.8	2.6	177	1.3	0.3	2.6
	U.S. No. 2	5.0	249	1.3	0.6	3.0	207	1.4	1.0	2.1	180	1.5	0.9	2.7
	All lots	N/A	408	1.3	0.6	3.0	381	1.4	0.8	2.6	357	1.5	0.3	2.7
Dockage	**U.S. No. 1**	N/A	159	0.4	0.1	0.6	174	0.3	0.1	0.5	177	0.3	0.1	0.5
	U.S. No. 2	N/A	247	0.4	0.1	1.1	206	0.4	0.2	0.7	180	0.4	0.2	0.8
	All lots	N/A	406	0.4	0.1	1.1	380	0.4	0.1	0.7	357	0.4	0.1	0.8
Wheat of Other Classes	**U.S. No. 1**	3.0	159	0.3	0.0	1.0	174	0.3	0.0	1.0	177	0.3	0.0	1.5
	U.S. No. 2	5.0	249	0.7	0.0	2.3	207	0.5	0.0	3.8	180	0.4	0.0	2.2
	All lots	N/A	408	0.6	0.0	2.3	381	0.4	0.0	3.8	357	0.4	0.0	2.2
Contrasting Classes	**U.S. No. 1**	1.0	159	0.3	0.0	1.0	174	0.3	0.0	1.0	177	0.3	0.0	1.0
	U.S. No. 2	2.0	249	0.7	0.0	1.9	207	0.4	0.0	1.4	180	0.4	0.0	1.9
	All lots	N/A	408	0.6	0.0	1.9	381	0.4	0.0	1.4	357	0.4	0.0	1.9

continued

Table 6. Summary of export Soft White wheat quality, factor averages by grade, 2001-2003--Continued

Factor	Grade	Grade Limit	2001 No. of Lots	2001 Avg.	2001 Low	2001 High	2002 No. of Lots	2002 Avg.	2002 Low	2002 High	2003 No. of Lots	2003 Avg.	2003 Low	2003 High
Protein (as is basis)	**U.S. No. 1**	N/A	156	10.0	8.0	11.8	172	10.3	8.2	12.1	175	10.2	8.1	11.6
	U.S. No. 2	N/A	224	10.1	0.4	11.5	187	10.8	8.7	12.1	169	10.8	9.5	11.5
	All lots	N/A	380	10.1	0.4	11.8	359	10.7	8.2	12.1	344	10.7	8.1	11.6
Protein (12% moisture)	**U.S. No. 1**	N/A	156	9.7	7.7	11.4	172	10.1	8.0	11.8	175	10.0	8.0	11.2
	U.S. No. 2	N/A	224	9.9	0.4	11.2	187	10.5	8.5	11.8	169	10.5	9.3	11.1
	All lots	N/A	380	9.8	0.4	11.4	359	10.4	8.0	11.8	344	10.4	8.0	11.2

N/A = Does not apply.
-- = No lots reported in this category.
[1]The sum of the component factor averages may not equal the average for this factor due to rounding.

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DISTRIBUTION FOR DOCKAGE — ALL GRADES

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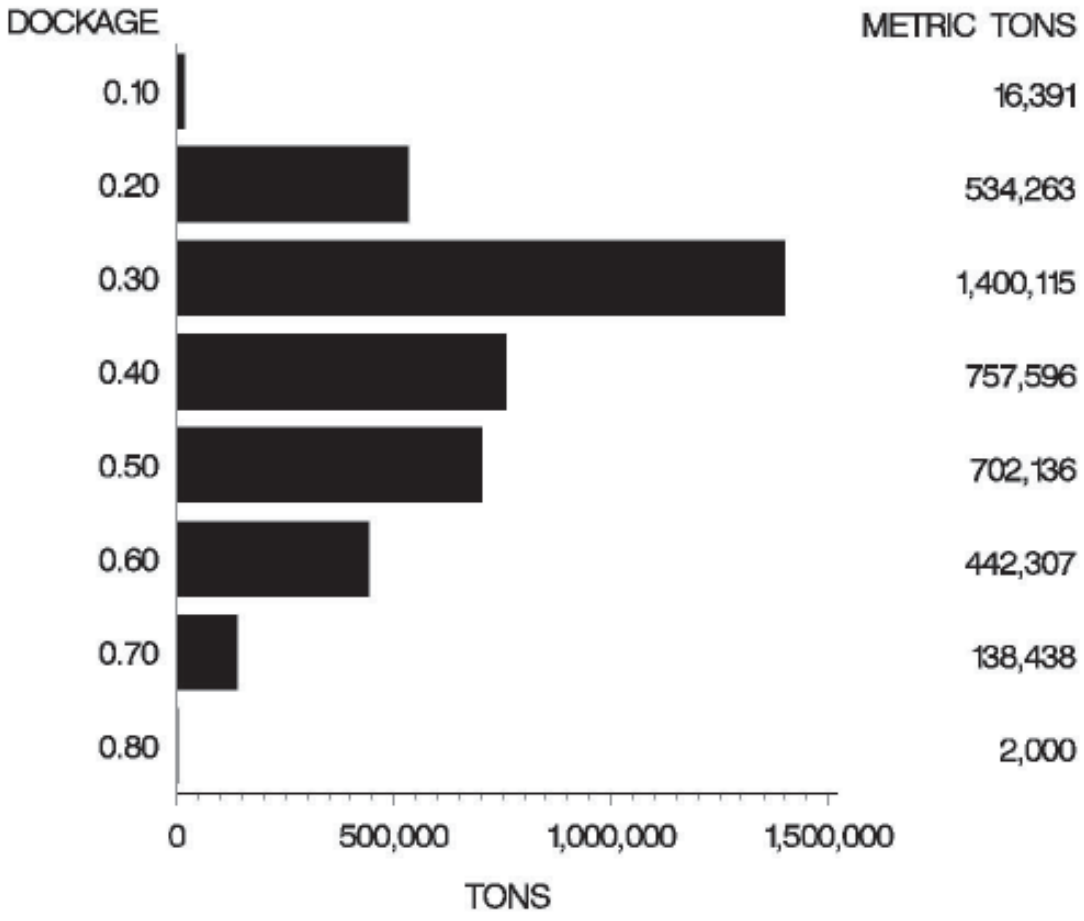

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DISTRIBUTION FOR PROTEIN (12% M) – ALL GRADES

SWH

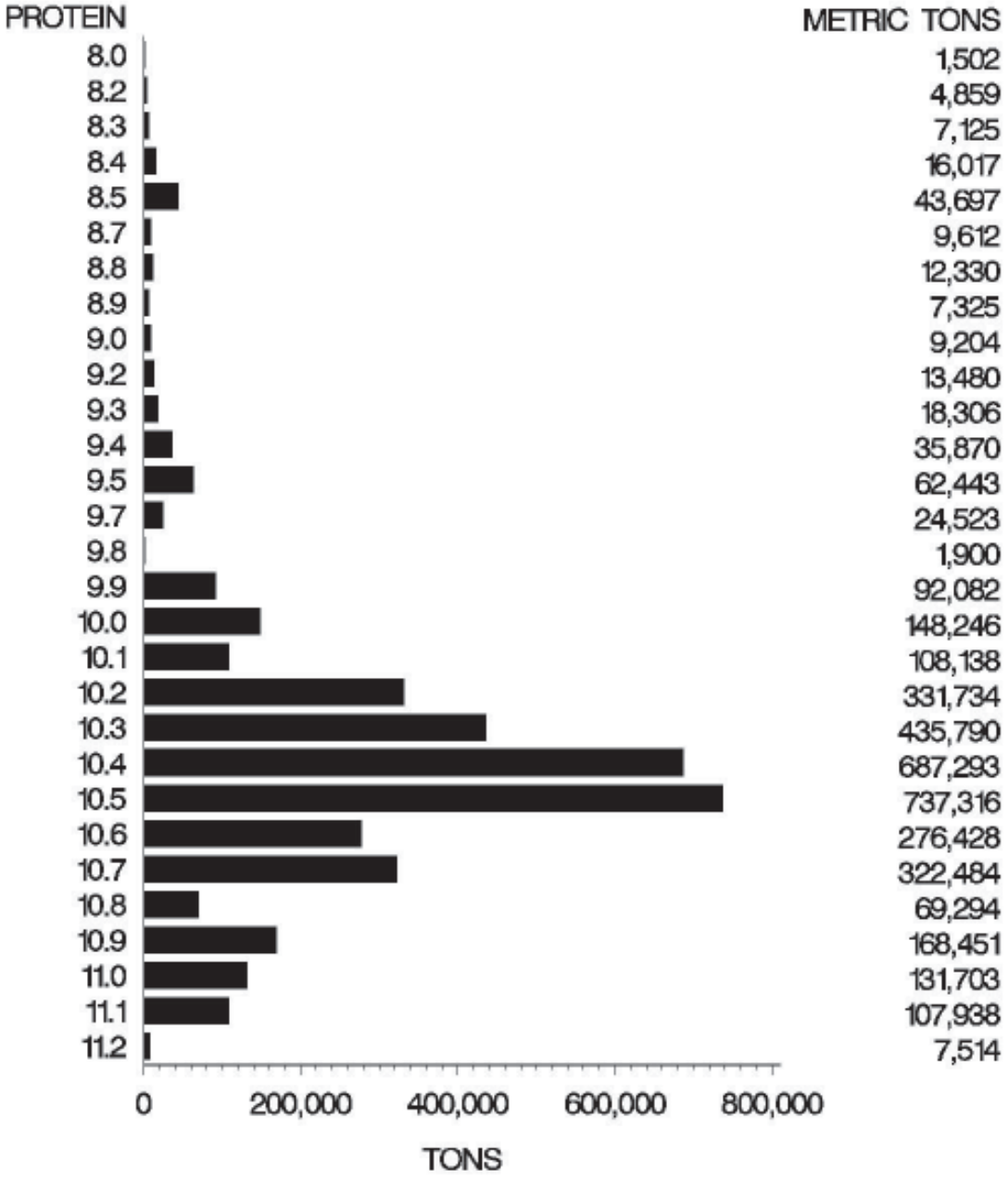


Table 7. Summary of export Hard White wheat quality, 2001-2003

Factor	Grade	Grade Limit	2001 No. of Lots	2001 Avg.	2001 Low	2001 High	2002 No. of Lots	2002 Avg.	2002 Low	2002 High	2003 No. of Lots	2003 Avg.	2003 Low	2003 High
Test Weight (lb/bu)	**U.S. No. 2**	58.0	4	61.7	60.4	62.6	5	62.1	59.6	63.0	6	62.5	61.5	62.7
	All lots	N/A	4	61.7	60.4	62.6	5	62.1	59.6	63.0	6	62.5	61.5	62.7
Test Weight (kg/hl)	**U.S. No. 2**	N/A	4	81.1	79.5	82.3	5	81.6	78.4	82.8	6	82.1	80.9	82.5
	All lots	N/A	4	81.1	79.5	82.3	5	81.6	78.4	82.8	6	82.1	80.9	82.5
Moisture	**U.S. No. 2**	N/A	4	11.0	9.5	11.8	5	9.6	8.3	10.1	6	10.4	8.6	10.7
	All lots	N/A	4	11.0	9.5	11.8	5	9.6	8.3	10.1	6	10.4	8.6	10.7
Heat-damaged Kernels	**U.S. No. 2**	0.2	4	0.0	0.0	0.0	5	0.0	0.0	0.0	6	0.0	0.0	0.0
	All lots	N/A	4	0.0	0.0	0.0	5	0.0	0.0	0.0	6	0.0	0.0	0.0
Damaged Kernels (Total)	**U.S. No. 2**	4.0	4	0.3	0.0	0.5	5	0.2	0.0	0.5	6	0.6	0.0	0.9
	All lots	N/A	4	0.3	0.0	0.5	5	0.2	0.0	0.5	6	0.6	0.0	0.9
Foreign Material	**U.S. No. 2**	0.7	4	0.1	0.0	0.1	5	0.1	0.1	0.1	6	0.1	0.1	0.2
	All lots	N/A	4	0.1	0.0	0.1	5	0.1	0.1	0.1	6	0.1	0.1	0.2
Shrunken and Broken	**U.S. No. 2**	5.0	4	1.8	1.4	2.9	5	1.7	0.9	3.7	6	1.5	0.8	1.9
	All lots	N/A	4	1.8	1.4	2.9	5	1.7	0.9	3.7	6	1.5	0.8	1.9
Total Defects	**U.S. No. 2**	5.0	4	2.1	1.7	3.0	5	2.0	1.0	3.8	6	2.2	0.9	2.9
	All lots	N/A	4	2.1	1.7	3.0	5	2.0	1.0	3.8	6	2.2	0.9	2.9
Dockage	**U.S. No. 2**	N/A	4	0.5	0.3	0.8	5	0.5	0.2	0.7	6	0.6	0.2	0.7
	All lots	N/A	4	0.5	0.3	0.8	5	0.5	0.2	0.7	6	0.6	0.2	0.7
Wheat of other Classes	**U.S. No. 2**	5.0	4	0.7	0.2	1.8	5	0.6	0.0	1.5	6	0.7	0.0	1.2
	All lots	N/A	4	0.7	0.2	1.8	5	0.6	0.0	1.5	6	0.7	0.0	1.2
Contrasting Classes	**U.S. No. 2**	2.0	4	0.6	0.2	0.7	5	0.6	0.0	1.5	6	0.6	0.0	0.8
	All lots	N/A	4	0.6	0.2	0.7	5	0.6	0.0	1.5	6	0.6	0.0	0.8
Protein (as is basis)	**U.S. No. 1**	N/A	3	12.8	12.6	13.2	5	13.3	11.7	15.3	6	12.1	11.4	13.8
	All lots	N/A	3	12.8	12.6	13.2	5	13.3	11.7	15.3	6	12.1	11.4	13.8
Protein (12% moisture)	**U.S. No. 1**	N/A	3	12.7	12.6	12.8	5	12.9	11.2	14.9	6	11.9	11.2	13.6
	All lots	N/A	3	12.7	12.6	12.8	5	12.9	11.2	14.9	6	11.9	11.2	13.6

N/A = Does not apply.
-- = No lots reported in this category.

Table 8. Summary of export Mixed wheat quality, 2001-2003

Factor	Grade	Grade Limit	2001 No. of Lots	2001 Avg.	2001 Low	2001 High	2002 No. of Lots	2002 Avg.	2002 Low	2002 High	2003 No. of Lots	2003 Avg.	2003 Low	2003 High
Test Weight (lb/bu)	**U.S. No. 2**	58.0	–	–	–	–	2	60.2	60.1	60.3	7	59.5	58.8	60.1
	All lots	N/A	–	–	–	–	2	60.2	60.1	60.3	7	59.5	58.8	60.1
Test Weight (kg/hl)	**U.S. No. 2**	N/A	–	–	–	–	2	79.2	79.0	79.4	7	78.3	77.4	79.0
	All lots	N/A	–	–	–	–	2	79.2	79.0	79.4	7	78.3	77.4	79.0
Moisture	**U.S. No. 2**	N/A	–	–	–	–	2	12.5	12.3	12.8	7	13.0	12.6	13.2
	All lots	N/A	–	–	–	–	2	12.5	12.3	12.8	7	13.0	12.6	13.2
Heat-damaged Kernels	**U.S. No. 2**	0.2	–	–	–	–	2	0.0	0.0	0.0	7	0.0	0.0	0.0
	All lots	N/A	–	–	–	–	2	0.0	0.0	0.0	7	0.0	0.0	0.0
Damaged Kernels (Total)	**U.S. No. 2**	4.0	–	–	–	–	2	1.7	1.2	2.3	7	1.8	1.4	2.2
	All lots	N/A	–	–	–	–	2	1.7	1.2	2.3	7	1.8	1.4	2.2
Foreign Material	**U.S. No. 2**	0.7	–	–	–	–	2	0.2	0.1	0.3	7	0.2	0.1	0.3
	All lots	N/A	–	–	–	–	2	0.2	0.1	0.3	7	0.2	0.1	0.3
Shrunken and Broken	**U.S. No. 2**	5.0	–	–	–	–	2	1.1	1.0	1.2	7	1.7	1.5	1.8
	All lots	N/A	–	–	–	–	2	1.1	1.0	1.2	7	1.7	1.5	1.8
Total Defects	**U.S. No. 2**	5.0	–	–	–	–	2	3.0	2.3	3.8	7	3.6	3.1	4.1
	All lots	N/A	–	–	–	–	2	3.0	2.3	3.8	7	3.6	3.1	4.1
Dockage	**U.S. No. 2**	N/A	–	–	–	–	2	0.8	0.8	0.9	7	0.8	0.5	1.0
	All lots	N/A	–	–	–	–	2	0.8	0.8	0.9	7	0.8	0.5	1.0
Protein (as is basis)	**U.S. No. 2**	N/A	–	–	–	–	2	14.7	14.5	14.8	7	14.0	13.9	14.1
	All lots	N/A	–	–	–	–	2	14.7	14.5	14.8	7	14.0	13.9	14.1
Protein (12% moisture)	**U.S. No. 2**	N/A	–	–	–	–	2	14.8	14.6	14.9	7	14.1	14.1	14.2
	All lots	N/A	–	–	–	–	2	14.8	14.6	14.9	7	14.1	14.1	14.2

-- = No lots reported in this category.

Export Corn

Corn Grades and Grade Requirements

Corn is divided into three classes: Yellow corn, White Corn, and Mixed corn. There are no subclasses of corn. Each class of corn is divided into five U.S. numerical grades and U.S. Sample grade. Special grades are provided to emphasize the qualities or conditions affecting the value of the corn. These special grades are made a part of the grade designation but do not affect the numerical or Sample grade designation.

U.S. Standards for Corn

Grade	Minimum test weight per bushel (pounds)	Maximum limits of-		
		Damaged kernels		Broken corn and foreign material
		Heat-damaged kernels (percent)	Total damaged kernels (percent)	(percent)
U.S. No. 1	56.0	0.1	3.0	2.0
U.S. No. 2	54.0	0.2	5.0	3.0
U.S. No. 3	52.0	0.5	7.0	4.0
U.S. No. 4	49.0	1.0	10.0	5.0
U.S. No. 5	46.0	3.0	15.0	7.0
U.S. Sample grade				

U.S. Sample grade is corn that:

(a) Does not meet the requirements for the grades U.S. Nos. 1, 2, 3, 4, or 5; or

(b) Contains stones which have an aggregate weight in excess of 0.1 percent of the sample weight, 2 or more pieces of glass, 3 or more crotalaria seeds (*Crotalaria* spp.), 2 or more castor beans, 8 or more cockleburs, 4 or more particles of an unknown foreign substance(s) or a commonly recognized harmful or toxic substance(s), or animal filth in excess of 0.20 percent in 1,000 grams; or

(c) Has a musty, sour, or commercially objectionable foreign odor; or

(d) Is heating or otherwise of distinctly low quality.

Definitions

Test weight (lb/bu) is pounds of grain per Winchester bushel (2,150.42 cubic inches) as determined using an approved device. Test weight is determined before the removal of broken corn and foreign material.

Test weight (kg/hl) is the metric system equivalent to pounds per bushel. Kilograms per hectoliter are calculated by multiplying pounds per bushel by 1.287.

Moisture is the water content of grain as determined by an approved moisture meter. The percentage of moisture in a sample does not affect the numerical grade.

Broken corn is all matter that passes readily through a 12/64-inch round-hole sieve and over a 6/64-inch round-hole sieve. The percentage of broken corn by itself does not affect the numerical grade.

Foreign material is all matter that passes readily through a 6/64-inch round-hole sieve and all matter other than corn that remains on top of the 12/64-inch round-hole sieve. The percentage of foreign material by itself does not affect the numerical grade.

Broken corn and foreign material is all matter that passes readily through a 12/64-inch sieve, and all matter other than corn that remains in the sieved sample.

Damaged kernels (total) are kernels and pieces of corn kernels that are badly ground-damaged, badly weather-damaged, diseased, frost-damaged, germ-damaged, heat-damaged, insect-bored, mold-damaged, sprout-damaged, or otherwise materially damaged.

Heat-damaged kernels are kernels and pieces of corn kernels that are materially discolored by excessive respiration, with dark discoloration extending out of the germ, through the sides, and into the back of the kernel.

Mixed corn is corn that does not meet the color requirements for either of the classes Yellow corn or White corn, and which includes White-capped Yellow corn.

Oil, protein, and starch percentages in corn are determined by an approved near infrared transmittance (NIRT) instrument calibrated to approved methods. Percent corn oil, protein, or starch is reported on a dry matter basis unless other basis is requested. The level of oil, protein, or starch in a sample does not affect the numerical grade.

Table 9. U.S. Corn Exports: Number of lots and quantity exported by class and grade, 2001-2003

Class	Grade	2001		2002		2003	
		Number of Lots	Metric Tons	Number of Lots	Metric Tons	Number of Lots	Metric Tons
Yellow Corn	U.S. No. 1	145	1,183,954	164	1,366,659	101	762,681
	U.S. No. 2	1,322	26,570,531	1,175	23,687,148	1,043	22,465,854
	U.S. No. 3	529	14,926,357	625	16,608,380	601	14,805,318
	U.S. No. 4	4	11,968	4	6,289	4	13,972
	U.S. No. 5	1	1,031	–	–	1	14,988
	U.S. Sample Grade	–	–	5	6,137	2	6,423
	Not inspected	1	9,367	1	4,145	1	8,395
	All lots	2,002	42,703,208	1,974	41,678,758	1,753	38,077,631
White Corn	U.S. No. 1	32	338,769	53	716,096	25	242,857
	U.S. No. 2	54	743,017	49	596,332	23	144,797
	U.S. No. 3	–	–	3	8,164	5	13,751
	U.S. No. 5	1	1,286	–	–	–	–
	All lots	87	1,083,072	105	1,320,592	53	401,405
All Classes	U.S. No. 1	177	1,522,723	217	2,082,755	126	1,005,538
	U.S. No. 2	1,376	27,313,548	1,224	24,283,480	1,066	22,610,651
	U.S. No. 3	529	14,926,357	628	16,616,544	606	14,819,069
	U.S. No. 4	4	11,968	4	6,289	4	13,972
	U.S. No. 5	2	2,317	–	–	1	14,988
	U.S. Sample Grade	–	–	5	6,137	2	6,423
	Not inspected	1	9,367	1	4,145	1	8,395
	All lots	2,089	43,786,280	2,079	42,999,350	1,806	38,479,036

-- = No lots reported in this category.
Not inspected = These lots were sold without grade designation.

Table 10. Summary of export Yellow corn quality, 2001-2003

Factor	Grade	Grade Limit	2001 No. of Lots	2001 Avg.	2001 Low	2001 High	2002 No. of Lots	2002 Avg.	2002 Low	2002 High	2003 No. of Lots	2003 Avg.	2003 Low	2003 High
Test Weight (lb/bu)	**U.S. No. 1**	56.0	145	58.2	56.4	60.1	164	58.6	56.1	69.2	101	58.0	56.2	60.5
	U.S. No. 2	54.0	1,322	57.1	54.0	60.0	1,175	57.2	54.1	60.4	1,043	57.0	54.2	61.9
	U.S. No. 3	52.0	529	57.3	52.0	60.6	625	57.4	52.2	60.4	601	57.2	53.1	60.2
	U.S. No. 4	49.0	4	55.9	51.6	59.7	4	51.4	49.7	58.4	4	58.2	57.1	58.9
	U.S. No. 5	46.0	1	57.3	57.3	57.3	–	–	–	–	1	56.2	56.2	56.2
	U.S. Sample Grade	N/A	–	–	–	–	5	55.8	55.0	60.2	2	57.3	56.5	60.3
	All lots	N/A	2,001	57.2	51.6	60.6	1,973	57.3	49.7	69.2	1,752	57.1	53.1	61.9
Test Weight (kg/hl)	**U.S. No. 1**	N/A	145	74.9	726	77.4	164	75.5	72.2	89.1	101	74.7	72.4	77.9
	U.S. No. 2	N/A	1,322	73.5	69.5	77.2	1,175	73.7	69.7	77.7	1,043	73.3	69.7	79.7
	U.S. No. 3	N/A	529	73.7	66.9	78.0	625	73.8	67.2	77.7	601	73.6	68.4	77.5
	U.S. No. 4	N/A	4	71.9	66.4	76.8	4	66.1	64.0	75.2	4	74.9	73.5	75.8
	U.S. No. 5	N/A	1	73.8	73.8	73.8	–	–	–	–	1	72.4	72.4	72.4
	U.S. Sample Grade	N/A	–	–	–	–	5	71.8	70.8	77.5	2	73.8	72.7	77.6
	All lots	N/A	2,001	73.6	66.4	78.0	1,973	73.8	64.0	89.1	1,752	73.5	68.4	79.7
Moisture	**U.S. No. 1**	N/A	145	14.1	13.4	14.8	164	14.4	12.9	14.9	101	14.5	12.9	15.5
	U.S. No. 2	N/A	1,322	14.1	12.2	15.0	1,175	14.2	12.3	15.0	1,043	14.4	13.0	15.0
	U.S. No. 3	N/A	529	14.3	13.1	15.4	625	14.3	4.2	15.3	601	14.5	12.8	15.5
	U.S. No. 4	N/A	4	14.0	13.4	14.7	4	14.2	13.7	14.4	4	14.5	14.1	14.7
	U.S. No. 5	N/A	1	14.8	14.8	14.8	–	–	–	–	1	14.2	14.2	14.2
	U.S. Sample Grade	N/A	–	–	–	–	5	14.0	13.2	14.7	2	14.4	14.3	14.8
	All lots	N/A	2,001	14.1	12.2	15.4	1,973	14.3	4.2	15.3	1,752	14.4	12.8	15.5
Heat-damaged Kernels	**U.S. No. 1**	0.1	145	0.0	0.0	0.0	164	0.0	0.0	0.0	101	0.0	0.0	0.0
	U.S. No. 2	0.2	1,322	0.0	0.0	0.2	1,175	0.0	0.0	0.2	1,043	0.0	0.0	0.2
	U.S. No. 3	0.5	529	0.0	0.0	0.2	625	0.0	0.0	0.2	601	0.0	0.0	0.1
	U.S. No. 4	1.0	4	0.0	0.0	0.0	4	0.0	0.0	0.0	4	0.0	0.0	0.0
	U.S. No. 5	3.0	1	0.0	0.0	0.0	–	–	–	–	1	0.0	0.0	0.0
	U.S. Sample Grade	N/A	–	–	–	–	5	0.0	0.0	0.0	2	0.0	0.0	0.0
	All lots	N/A	2,001	0.0	0.0	0.2	1,973	0.0	0.0	0.2	1,752	0.0	0.0	0.2
Damaged Kernels (Total)	**U.S. No. 1**	3.0	145	1.8	0.4	3.0	164	1.8	0.3	3.0	101	1.7	0.2	2.9
	U.S. No. 2	5.0	1,322	3.0	0.0	5.0	1,175	3.1	0.0	5.0	1,043	2.8	0.0	5.0
	U.S. No. 3	7.0	529	3.5	0.0	6.8	625	3.6	0.0	6.8	601	3.0	0.0	6.8
	U.S. No. 4	10.0	4	3.6	2.1	5.3	4	4.4	3.0	6.5	4	2.0	1.1	4.9
	U.S. No. 5	15.0	1	0.9	0.9	0.9	–	–	–	–	1	10.5	10.5	10.5
	U.S. Sample Grade	N/A	–	–	–	–	5	4.7	1.1	6.0	2	4.7	4.5	4.7
	All lots	N/A	2,001	3.1	0.0	6.8	1,973	3.3	0.0	6.8	1,752	2.9	0.0	10.5

continued

Table 10. Summary of export Yellow corn quality, 2001-2003--Continued

Factor	Grade	Grade Limit	2001 No. of Lots	2001 Avg.	2001 Low	2001 High	2002 No. of Lots	2002 Avg.	2002 Low	2002 High	2003 No. of Lots	2003 Avg.	2003 Low	2003 High
Broken Corn and Foreign Material	**U.S. No. 1**	2.0	145	1.6	0.6	2.0	163	1.6	0.7	2.0	101	1.7	0.6	2.0
	U.S. No. 2	3.0	1,319	2.6	0.7	3.0	1,172	2.7	0.7	3.0	1,041	2.7	0.7	3.0
	U.S. No. 3	4.0	529	2.9	0.7	4.0	625	3.3	0.9	4.0	599	3.3	1.0	4.0
	U.S. No. 4	5.0	4	3.2	1.7	4.9	4	2.5	1.9	4.4	4	4.3	4.2	4.7
	U.S. No. 5	7.0	1	5.3	5.3	5.3	--	--	--	--	1	3.5	3.5	3.5
	U.S. Sample Grade	N/A	--	--	--	--	5	2.0	1.9	7.0	2	8.5	3.1	9.9
	All lots	N/A	1,998	2.7	0.6	5.3	1,969	2.9	0.7	7.0	1,748	2.9	0.6	9.9
Broken Corn	**U.S. No. 1**	N/A	4	1.1	0.9	1.4	5	1.2	1.0	1.4	1	1.4	1.4	1.4
	U.S. No. 2	N/A	150	1.9	0.8	2.3	145	2.0	0.7	2.4	146	2.1	0.8	2.6
	U.S. No. 3	N/A	70	2.3	0.6	3.0	34	2.7	1.0	3.1	45	2.7	1.7	3.1
	U.S. No. 4	N/A	--	--	--	--	--	--	--	--	1	3.1	3.1	3.1
	U.S. No. 5	N/A	--	--	--	--	--	--	--	--	--	--	--	--
	U.S. Sample Grade	N/A	--	--	--	--	--	--	--	--	1	2.5	2.5	2.5
	All lots	N/A	224	2.1	0.6	3.0	184	2.2	0.7	3.1	194	2.3	0.8	3.1
Foreign Material	**U.S. No. 1**	N/A	4	0.3	0.2	0.5	5	0.5	0.4	0.7	1	0.3	0.3	0.3
	U.S. No. 2	N/A	150	0.7	0.2	2.0	144	0.7	0.2	1.0	145	0.7	0.4	1.7
	U.S. No. 3	N/A	70	0.8	0.4	1.6	34	0.8	0.3	1.0	44	0.8	0.4	1.0
	U.S. No. 4	N/A	--	--	--	--	--	--	--	--	1	1.6	1.6	1.6
	U.S. No. 5	N/A	--	--	--	--	--	--	--	--	--	--	--	--
	U.S. Sample Grade	N/A	--	--	--	--	--	--	--	--	1	0.6	0.6	0.6
	All lots	N/A	224	0.7	0.2	2.0	183	0.7	0.2	1.0	192	0.7	0.3	1.7

N/A = Does not apply.
-- = No lots reported in this category.

Table 11. Summary of export White corn quality, 2001-2003

			2001				2002				2003			
Factor	Grade	Grade Limit	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High
Test Weight (lb/bu)	**U.S. No. 1**	56.0	32	59.2	56.5	60.3	53	59.8	57.8	60.9	25	59.2	57.7	60.9
	U.S. No. 2	54.0	54	59.4	55.8	60.3	49	59.6	57.9	60.6	23	59.4	58.4	60.1
	U.S. No. 3	52.0	–	–	–	–	3	58.6	56.7	59.4	5	59.1	57.8	59.7
	U.S. No. 5	46.0	1	47.7	47.7	47.7	–	–	–	–	–	–	–	–
	All lots	N/A	87	59.3	47.7	60.3	105	59.7	56.7	60.9	53	59.2	57.7	60.9
Test Weight (kg/hl)	**U.S. No. 1**	N/A	32	76.3	72.7	77.6	53	76.9	74.4	78.4	25	76.2	74.3	78.4
	U.S. No. 2	N/A	54	76.4	71.8	77.6	49	76.8	74.5	78.0	23	76.5	75.2	77.4
	U.S. No. 3	N/A	–	–	–	–	3	75.4	73.0	76.5	5	76.1	74.4	76.8
	U.S. No. 5	N/A	1	61.4	61.4	61.4	–	–	–	–	–	–	–	–
	All lots	N/A	87	76.4	61.4	77.6	105	76.9	73.0	78.4	53	76.3	74.3	78.4
Moisture	**U.S. No 1**	N/A	32	13.9	12.9	14.6	53	14.0	13.6	14.8	25	14.0	13.7	14.6
	U.S. No. 2	N/A	54	14.0	12.5	14.8	49	14.0	13.2	14.5	23	14.2	12.9	14.6
	U.S. No. 3	N/A	–	–	–	–	3	13.7	12.6	13.9	5	13.8	13.6	14.0
	U.S. No. 5	N/A	1	14.1	14.1	14.1	–	–	–	–	–	–	–	–
	All lots	N/A	87	14.0	12.5	14.8	105	14.0	12.6	14.8	53	14.0	12.9	14.6
Heat-damaged Kernels	**U.S. No. 1**	0.1	32	0.0	0.0	0.0	53	0.0	0.0	0.0	25	0.0	0.0	0.0
	U.S. No. 2	0.2	54	0.0	0.0	0.0	49	0.0	0.0	0.0	23	0.0	0.0	0.1
	U.S. No. 3	0.5	–	–	–	–	3	0.0	0.0	0.0	5	0.0	0.0	0.0
	U.S. No. 5	3.0	1	0.0	0.0	0.0	–	–	–	–	–	–	–	–
	All lots	N/A	87	0.0	0.0	0.0	105	0.0	0.0	0.0	53	0.0	0.0	0.1
Damaged Kernels (Total)	**U.S. No. 1**	3.0	32	1.8	0.3	3.0	53	1.7	0.7	2.8	25	2.0	0.5	2.8
	U.S. No. 2	5.0	54	2.4	0.5	4.9	49	2.5	0.8	4.6	23	2.3	0.6	4.3
	U.S. No. 3	7.0	–	–	–	–	3	2.3	1.1	5.9	5	1.4	1.1	1.9
	U.S. No. 5	15.0	1	2.8	2.8	2.8	–	–	–	–	–	–	–	–
	All lots	N/A	87	2.2	0.3	4.9	105	2.1	0.7	5.9	53	2.1	0.5	4.3
Broken Corn and Foreign Material	**U.S. No. 1**	2.0	32	1.6	0.9	2.0	53	1.5	0.8	2.0	25	1.8	0.9	2.0
	U.S. No. 2	3.0	54	2.0	0.7	2.9	49	2.0	1.0	3.0	23	2.3	1.1	2.9
	U.S. No. 3	4.0	–	–	–	–	3	3.2	1.7	3.8	5	2.8	1.9	3.1
	U.S. No. 5	7.0	1	3.5	3.5	3.5	–	–	–	–	–	–	–	–
	All lots	N/A	87	1.9	0.7	3.5	105	1.7	0.8	3.8	53	2.0	0.9	3.1

continued

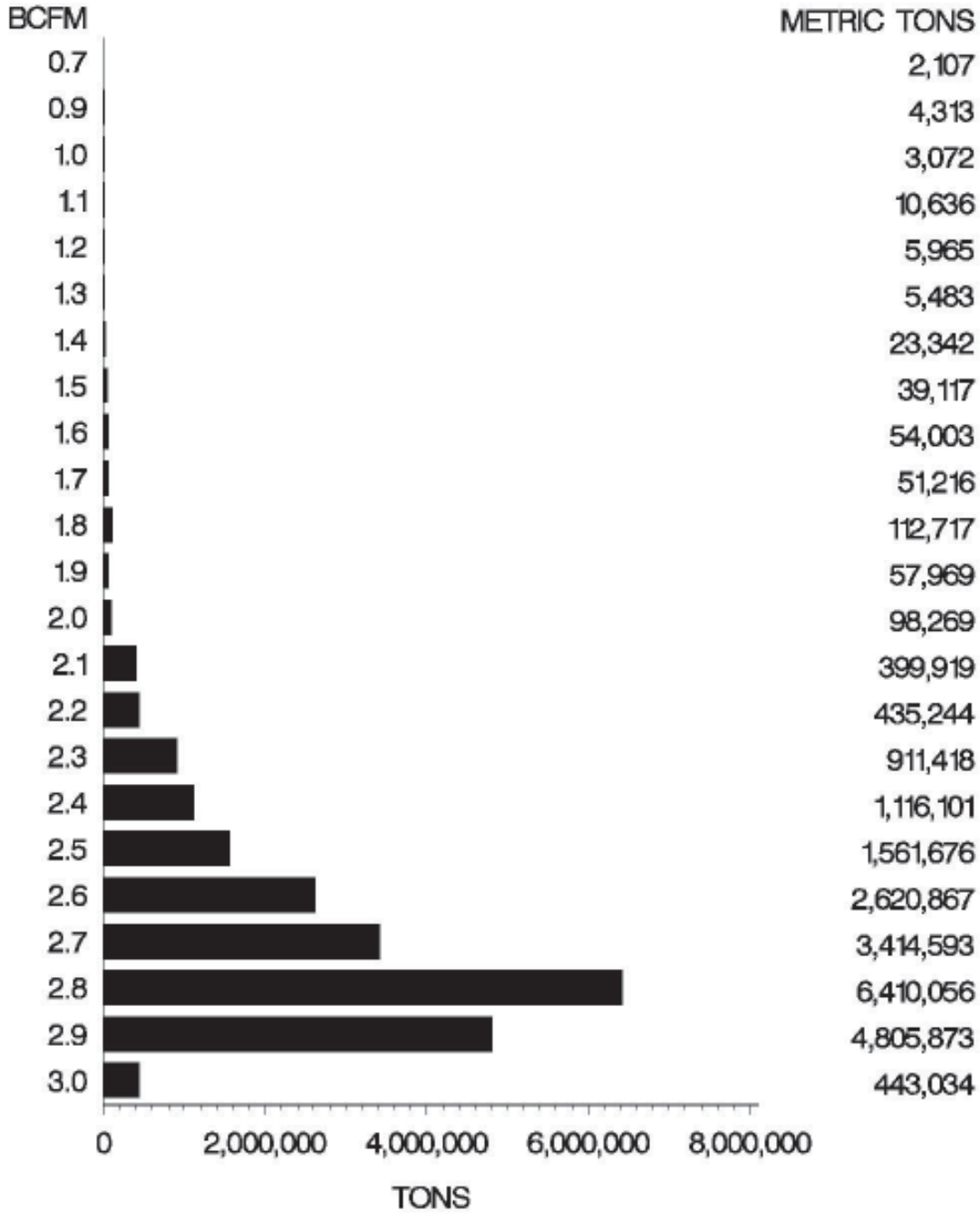
Table 11. Summary of export White corn quality, 2001-2003--Continued

Factor	Grade	Grade Limit	2001 No. of Lots	2001 Avg.	2001 Low	2001 High	2002 No. of Lots	2002 Avg.	2002 Low	2002 High	2003 No. of Lots	2003 Avg.	2003 Low	2003 High
Broken Corn	**U.S. No. 1**	N/A	4	1.1	0.8	1.4	9	1.3	1.0	1.5	5	1.4	1.1	1.7
	U.S. No. 2	N/A	1	1.6	1.6	1.6	--	--	--	--	1	1.6	1.6	1.6
	U.S. No. 3	N/A	--	--	--	--	--	--	--	--	--	--	--	--
	All lots	N/A	5	1.1	0.8	1.6	9	1.3	1.0	1.5	6	1.4	1.1	1.7
Foreign Material	**U.S. No. 1**	N/A	4	0.4	0.2	0.5	9	0.4	0.3	0.6	5	0.4	0.3	0.5
	U.S. No. 2	N/A	1	0.5	0.5	0.5	--	--	--	--	1	0.5	0.5	0.5
	U.S. No. 3	N/A	--	--	--	--	--	--	--	--	--	--	--	--
	All lots	N/A	5	0.4	0.2	0.5	9	0.4	0.3	0.6	6	0.4	0.3	0.5

N/A = Does not apply.
-- = No lots reported in this category.

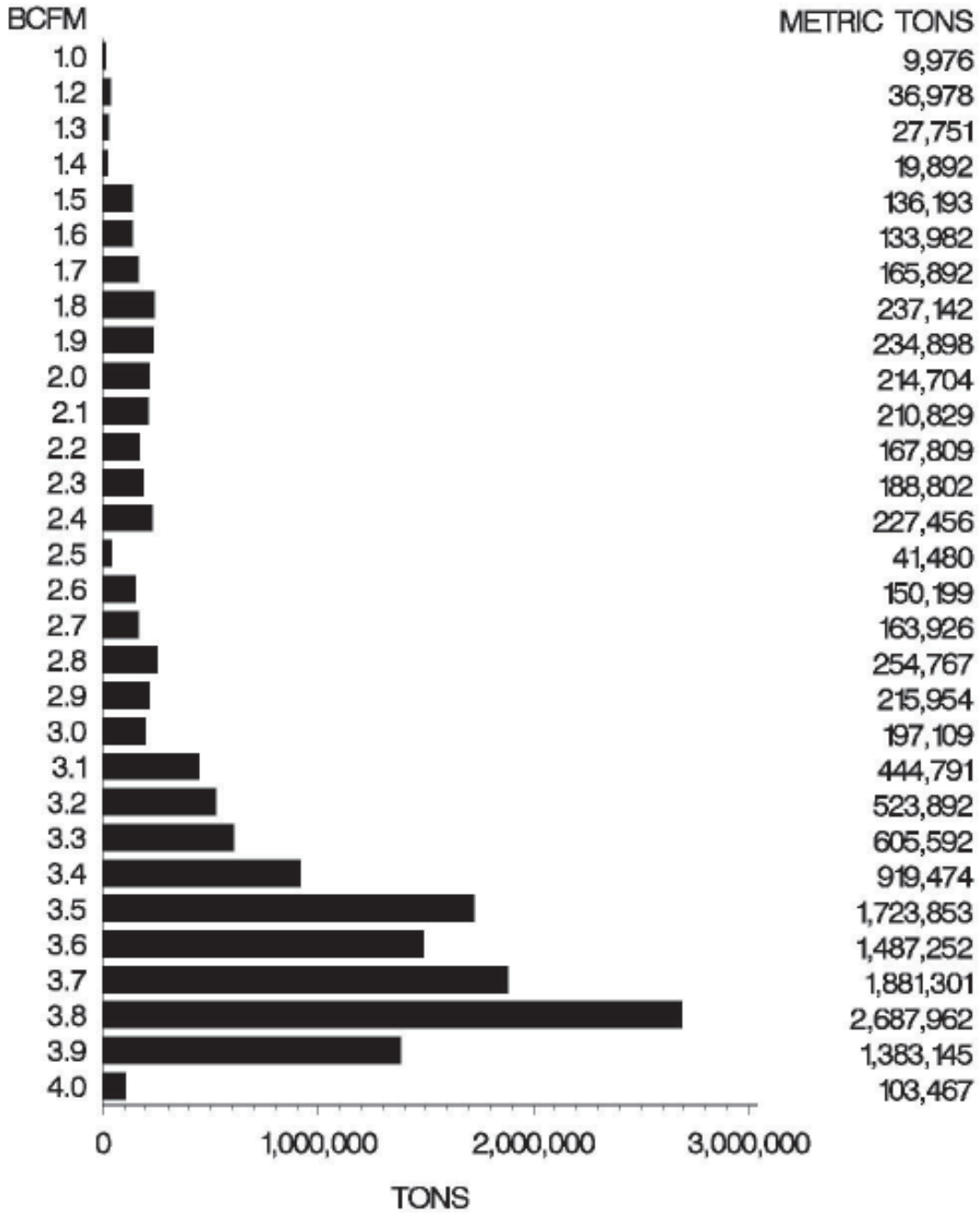
U.S. CORN EXPORTED, 2003

DISTRIBUTION FOR BCFM — GRADE 2



U.S. CORN EXPORTED, 2003

DISTRIBUTION FOR BCFM — GRADE 3



Export Soybeans

Soybean Grades and Grade Requirements

There are two classes of soybeans: Yellow soybeans and Mixed soybeans. There are no soybean subclasses. The class Yellow soybeans is the class most commonly exported by the U.S. market. Each class is divided into four U.S. numerical grades and U.S. Sample grade.

Special grades are provided to emphasize special qualities or conditions affecting the value of the soybeans. These special grades are a part of the grade designation but do not affect the numerical or Sample grade designation.

U.S. Standards for Soybeans

Grade	Minimum test weight per bushel (pounds)	Maximum limits of-				
		Damaged kernels		Foreign Material (percent)	Splits (percent)	Soybeans of other colors[1] (percent)
		Heat-damaged kernels (percent)	Total damaged kernels (percent)			
U.S. No. 1	56.0	0.2	2.0	1.0	10.0	1.0
U.S. No. 2	54.0	0.5	3.0	2.0	20.0	2.0
U.S. No. 3	52.0	1.0	5.0	3.0	30.0	5.0
U.S. No. 4	49.0	3.0	8.0	5.0	40.0	10.0
U.S. Sample grade						

U.S. Sample grade shall be soybeans which:

(a) Do not meet the requirements for U.S. Nos. 1, 2, 3, or 4; or

(b) Contain 4 or more stones which have an aggregate weight in excess of 0.1 percent of the sample weight, 1 or more pieces of broken glass, 3 or more crotalaria seeds, 2 or more castor beans, 4 or more particles of an unknown foreign substance(s) or a commonly recognized harmful or toxic foreign substance(s), 10 or more rodent pellets, bird droppings, or an equivalent quantity of other animal filth, 11 or more pieces, in any combination, of animal filth, castor beans, crotalaria seeds, glass, stones, or unknown foreign substance. The weight of stones is not applicable for total other material; or

(c) Have a musty, sour, or commercially objectionable foreign odor (except garlic odor); or

(d) Are heating or otherwise of distinctly low quality.

[1] Does not apply to Mixed soybeans.

Definitions

Test weight (lb/bu) is pounds of grain per Winchester bushel determined by an approved device before the removal of foreign material.

Test weight (kg/hl) is the metric system equivalent to pounds per bushel. Kilograms per hectoliter are calculated by multiplying pounds per bushel by 1.287.

Moisture is the water content of grain as determined by an approved electronic moisture meter. The percentage of moisture in a sample does not affect the numerical grade.

Splits are soybeans with more than one-fourth of the bean removed and which are not damaged.

Damaged kernels are soybeans and pieces of soybeans which are badly ground-damaged, badly weather-damaged, diseased, frost-damaged, heat-damaged, insect-bored, mold-damaged, sprout damaged, stinkbug-stung, or otherwise materially damaged.

Heat-damaged kernels are soybeans and pieces of soybeans which are materially discolored and damaged by heat.

Foreign material is all matter, including soybeans and pieces of soybeans, that will pass readily through an 8/64-inch sieve and all matter other than soybeans remaining on the sieve after sieving.

Soybeans of other colors are soybeans which have green, black, brown, or bicolored seed coats. Before September 9, 1985, this factor was called "brown, black, and/or bicolored soybeans in yellow or green soybeans."

Mixed soybeans is a combination of classes of soybeans which does not meet the minimum requirements of a the class Yellow soybeans.

Protein and oil percentages in soybenas are determined by an approved near infrared transmittance (NIRT) instrument calibrated to approved methods. Percent protein and oil is reported on a 13 percent moisture basis unless another basis is requested. The level of protein and oil in a sample does not affec the numerical grade.

Table 12. U.S. Soybean Exports: Number of lots and quantity exported by class and grade, 2001-2003

	2001		2002		2003	
Grade	Number of Lots	Metric Tons	Number of Lots	Metric Tons	Number of Lots	Metric Tons
U.S. No. 1	81	1,090,388	72	1,261,851	65	821,048
U.S. No. 2	1,018	25,197,627	1,007	24,667,871	922	26,011,236
U.S. No. 3	34	728,224	13	103,707	23	413,504
U.S. No. 4	–	–	2	13,474	1	20,552
U.S. Sample Grade	2	4,745	–	–	5	47,712
Not inspected	4	49,936	3	39,873	16	792,405
All lots	1,139	27,070,920	1,097	26,086,776	1,032	28,106,457

Not inspected = These lots were sold without grade designation.

Table 13. Summary of export Soybean quality, 2001-2003

			2001				2002				2003			
Factor	Grade	Grade Limit	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High
Test Weight (lb/bu)	U.S. No. 1	56.0	81	56.4	56.0	58.1	72	56.4	56.0	58.1	65	56.5	56.0	58.2
	U.S. No. 2	54.0	1,018	55.6	54.0	58.3	1,007	55.9	54.0	58.5	922	55.9	54.1	59.2
	U.S. No. 3	52.0	34	54.7	53.4	57.4	13	56.3	54.4	57.4	23	54.8	53.3	56.8
	U.S. No. 4	49.0	--	--	--	--	2	53.1	53.1	54.5	1	54.9	54.9	54.9
	U.S. Sample Grade	N/A	2	53.6	53.6	57.4	--	--	--	--	5	53.5	51.8	55.5
	All lots	N/A	1,135	55.6	53.4	58.3	1,094	55.9	53.1	58.5	1,016	55.9	51.8	59.2
Test Weight (kg/hl)	U.S. No. 1	N/A	81	72.7	72.1	74.8	72	72.6	72.1	74.8	65	72.7	72.1	74.9
	U.S. No. 2	N/A	1,018	71.6	69.5	75.1	1,007	72.0	69.6	75.3	922	71.9	69.6	76.2
	U.S. No. 3	N/A	34	70.4	68.8	73.9	13	72.4	70.0	73.8	23	70.6	68.6	73.1
	U.S. No. 4	N/A	--	--	--	--	2	68.4	68.3	70.2	1	70.7	70.7	70.7
	U.S. Sample Grade	N/A	2	69.0	68.9	73.9	--	--	--	--	5	68.8	66.7	71.5
	All lots	N/A	1,135	71.6	68.8	75.1	1,094	72.0	68.3	75.3	1,016	71.9	66.7	76.2
Moisture	U.S. No. 1	N/A	81	11.8	10.6	13.0	71	12.0	10.2	13.7	65	12.3	10.9	13.8
	U.S. No. 2	N/A	1,018	11.5	9.9	13.6	1,006	12.1	9.7	14.0	921	12.2	10.0	13.8
	U.S. No. 3	N/A	32	10.5	9.4	13.3	13	11.0	10.1	12.4	22	12.5	10.5	13.2
	U.S. No. 4	N/A	--	--	--	--	2	12.5	12.5	13.1	1	12.9	12.9	12.9
	U.S. Sample Grade	N/A	2	10.3	10.3	12.1	--	--	--	--	5	12.9	12.7	13.3
	All lots	N/A	1,135	11.5	9.4	13.6	1,092	12.1	9.7	14.0	1,014	12.2	10.0	13.8
Heat-damaged Kernels	U.S. No. 1	0.2	81	0.0	0.0	0.2	72	0.0	0.0	0.1	65	0.0	0.0	0.1
	U.S. No. 2	0.5	1,018	0.1	0.0	0.4	1,007	0.1	0.0	0.5	922	0.2	0.0	0.5
	U.S. No. 3	1.0	34	0.0	0.0	0.3	13	0.0	0.0	0.2	23	0.2	0.0	0.8
	U.S. No. 4	3.0	--	--	--	--	2	0.3	0.2	1.6	1	0.4	0.4	0.4
	U.S. Sample Grade	N/A	2	0.0	0.0	0.0	--	--	--	--	5	1.1	0.0	2.1
	All lots	N/A	1,135	0.1	0.0	0.4	1,094	0.1	0.0	1.6	1,016	0.2	0.0	2.1
Damaged Kernels (Total)	U.S. No. 1	2.0	81	0.7	0.0	1.6	72	0.7	0.0	1.6	65	0.6	0.0	1.5
	U.S. No. 2	3.0	1,018	1.4	0.0	3.0	1,007	1.4	0.0	3.0	922	1.5	0.0	3.0
	U.S. No. 3	5.0	34	0.9	0.2	4.1	13	0.7	0.1	1.9	23	2.6	0.1	4.0
	U.S. No. 4	8.0	--	--	--	--	2	5.7	3.5	5.8	1	4.1	4.1	4.1
	U.S. Sample Grade	N/A	2	0.1	0.1	0.6	--	--	--	--	5	9.8	1.4	17.1
	All lots	N/A	1,135	1.3	0.0	4.1	1,094	1.4	0.0	5.8	1,016	1.5	0.0	17.1

continued

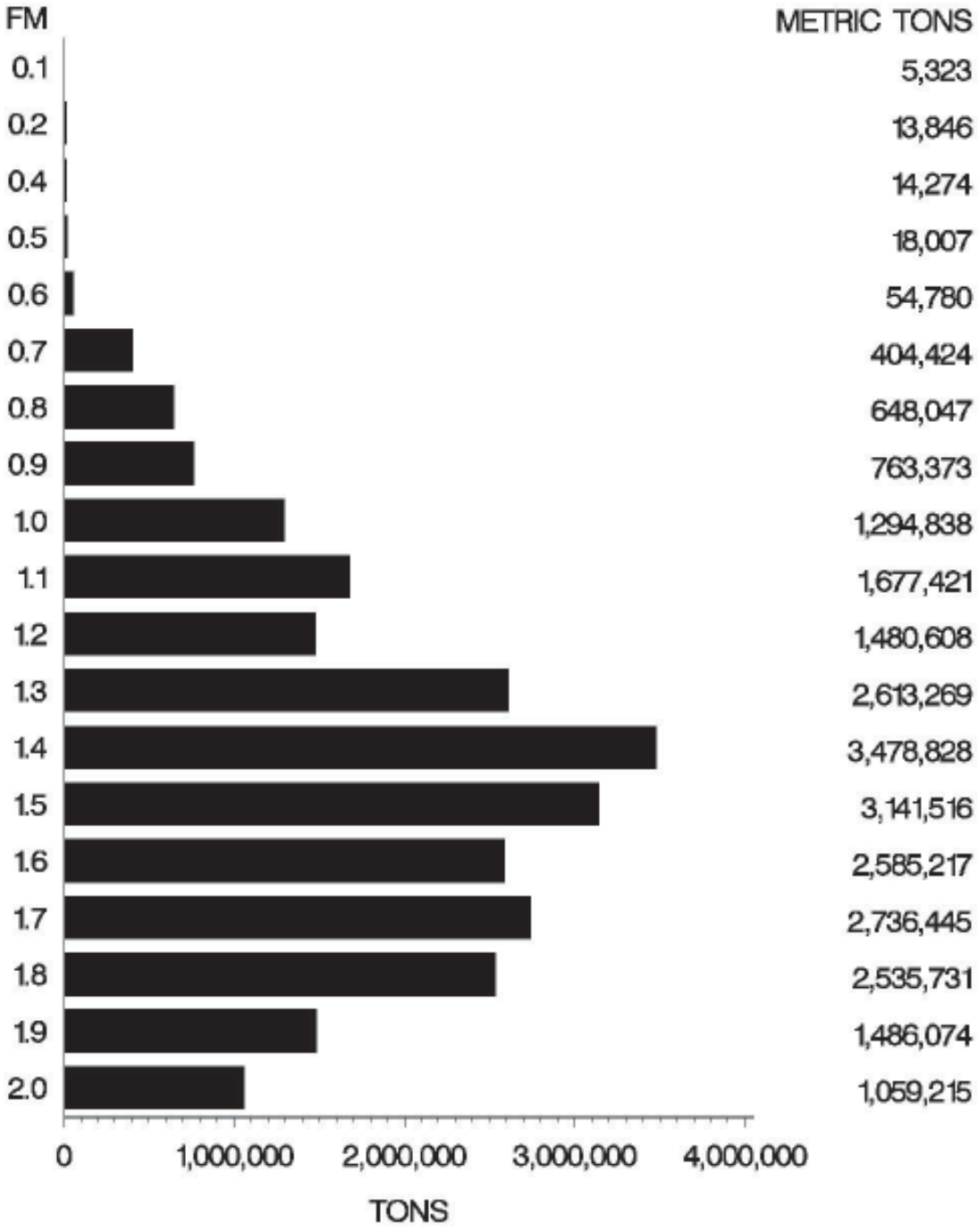
Table 13. Summary of export Soybean quality, 2001-2003--Continued

Factor	Grade	Grade Limit	2001 No. of Lots	2001 Avg.	2001 Low	2001 High	2002 No. of Lots	2002 Avg.	2002 Low	2002 High	2003 No. of Lots	2003 Avg.	2003 Low	2003 High
Foreign Material	**U.S. No. 1**	1.0	81	0.8	0.0	1.0	72	0.8	0.0	1.0	65	0.8	0.0	1.0
	U.S. No. 2	2.0	1,018	1.7	0.0	2.0	1,007	1.5	0.0	2.0	922	1.5	0.1	2.0
	U.S. No. 3	3.0	34	2.2	0.4	3.0	13	2.0	0.6	2.8	23	1.8	1.0	2.9
	U.S. No. 4	5.0	--	--	--	--	2	1.0	1.0	1.0	1	2.0	2.0	2.0
	U.S. Sample Grade	N/A	2	2.6	0.5	2.6	--	--	--	--	5	2.0	1.5	2.5
	All lots	N/A	1,135	1.7	0.0	3.0	1,094	1.5	0.0	2.8	1,016	1.4	0.0	2.9
Splits	**U.S. No. 1**	10.0	81	6.4	0.0	10.0	72	7.1	0.2	9.9	65	6.2	0.2	9.8
	U.S. No. 2	20.0	1,018	11.1	0.0	20.0	1,007	8.4	0.0	19.7	922	8.0	0.0	19.8
	U.S. No. 3	30.0	34	20.0	2.7	29.6	13	9.5	3.4	14.0	23	7.5	3.8	23.2
	U.S. No. 4	40.0	--	--	--	--	2	6.1	3.5	6.2	1	6.1	6.1	6.1
	U.S. Sample Grade	N/A	2	40.3	3.1	40.7	--	--	--	--	5	7.4	2.8	9.8
	All lots	N/A	1,135	11.2	0.0	40.7	1,094	8.3	0.0	19.7	1,016	8.0	0.0	23.2
Soybeans of Other Colors	**U.S. No. 1**	1.0	81	0.1	0.0	0.5	72	0.1	0.0	0.9	65	0.5	0.0	8.0
	U.S. No. 2	2.0	1,018	0.1	0.0	1.0	1,007	0.1	0.0	1.8	922	0.4	0.0	11.0
	U.S. No. 3	5.0	34	0.1	0.0	4.1	13	0.2	0.0	3.5	23	0.2	0.0	3.0
	U.S. No. 4	10.0	--	--	--	--	2	0.2	0.0	0.2	1	0.1	0.1	0.1
	U.S. Sample Grade	N/A	2	0.0	0.0	0.0	--	--	--	--	5	0.1	0.0	0.1
	All lots	N/A	1,135	0.1	0.0	4.1	1,094	0.1	0.0	3.5	1,016	0.4	0.0	11.0
Protein (adjusted to 13% moisture)	**U.S. No. 1**	N/A	70	35.7	33.1	38.6	56	35.0	33.4	38.2	47	35.6	34.6	41.5
	U.S. No. 2	N/A	577	35.8	32.6	38.7	575	35.2	33.1	38.3	497	35.3	34.2	39.8
	U.S. No. 3	N/A	8	36.0	35.5	38.2	4	34.7	33.2	35.6	10	35.3	34.9	37.0
	U.S. No. 4	N/A	--	--	--	--	--	--	--	--	--	--	--	--
	U.S. Sample Grade	N/A	--	--	--	--	--	--	--	--	--	--	--	--
	All lots	N/A	655	35.8	32.6	38.7	635	35.2	33.1	38.3	554	35.3	34.2	41.5
Oil (adjusted to 13% moisture)	**U.S. No. 1**	N/A	70	18.3	15.5	19.6	56	18.6	14.5	19.7	47	18.7	15.1	19.7
	U.S. No. 2	N/A	580	18.5	17.0	20.0	576	18.8	14.6	20.0	494	18.9	15.2	20.3
	U.S. No. 3	N/A	8	18.5	16.8	19.0	4	18.7	18.6	19.3	10	19.8	17.9	20.5
	U.S. No. 4	N/A	--	--	--	--	--	--	--	--	--	--	--	--
	U.S. Sample Grade	N/A	--	--	--	--	--	--	--	--	--	--	--	--
	All lots	N/A	658	18.5	15.5	20.0	636	18.8	14.5	20.0	551	18.9	15.1	20.5

N/A = Does not apply.
-- = No lots reported in this category.

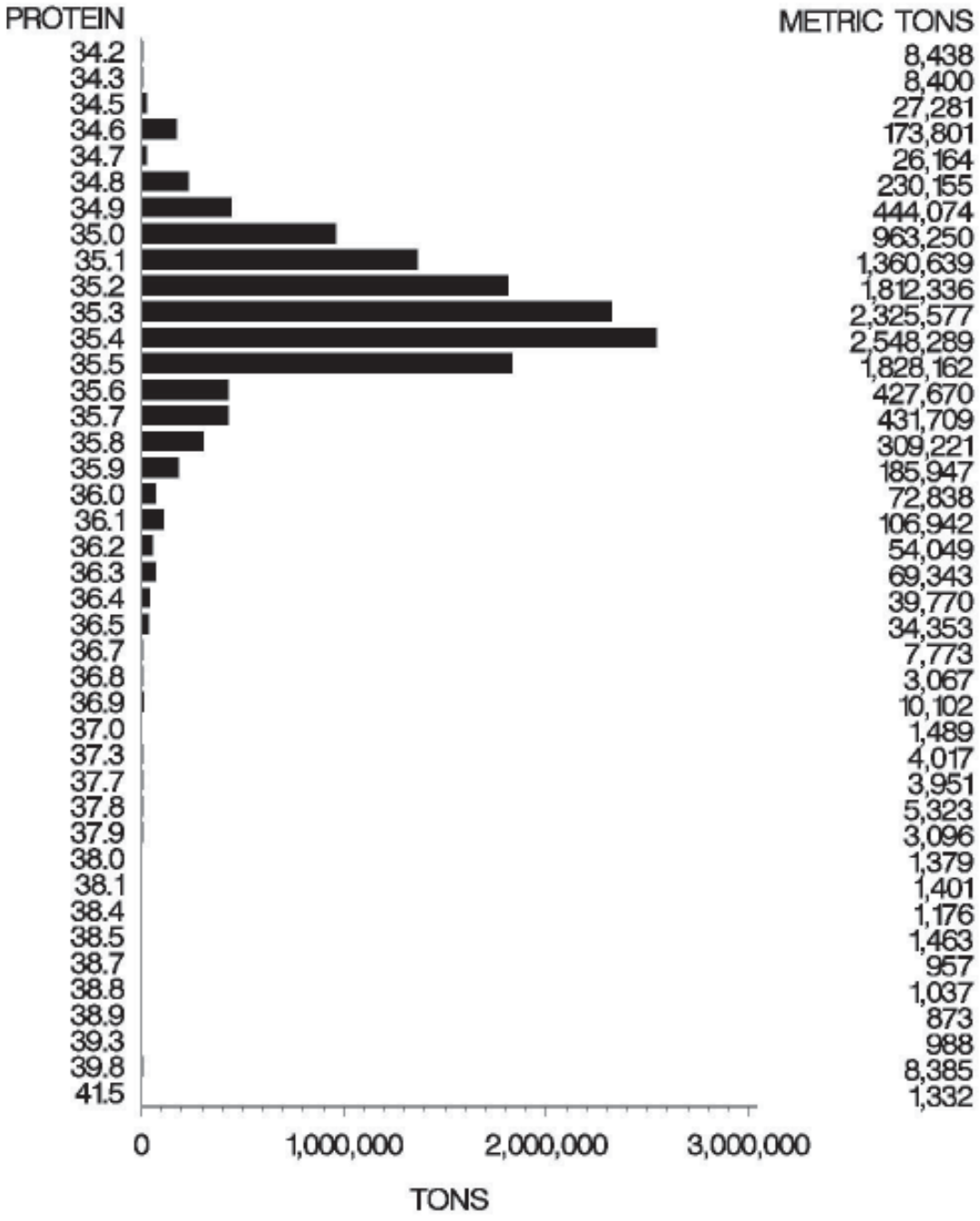
U.S. SOYBEANS EXPORTED, 2003

DISTRIBUTION FOR FM – GRADE 2



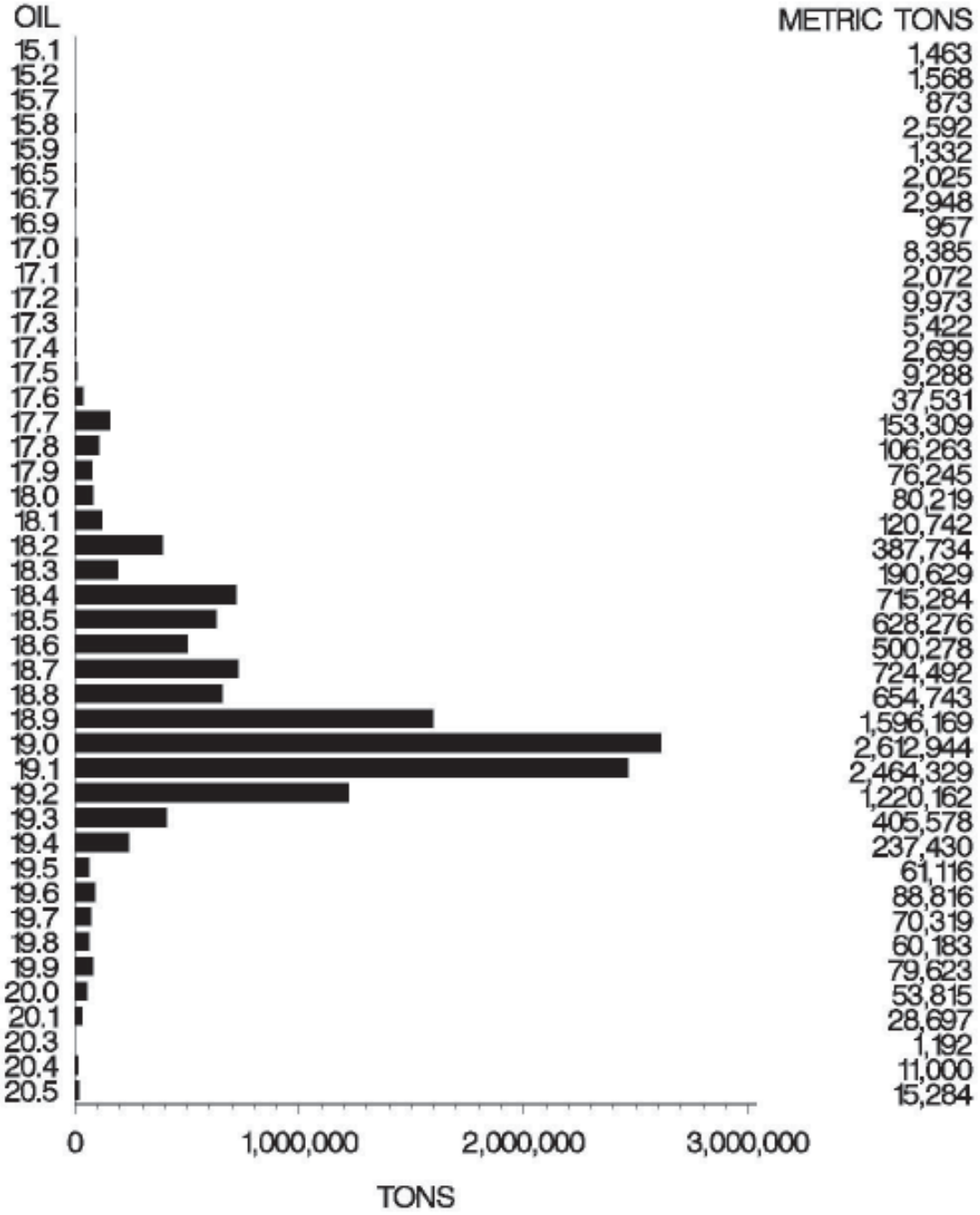
U.S. SOYBEANS EXPORTED, 2003

DISTRIBUTION FOR PROTEIN (13% M) — ALL GRADES



U.S. SOYBEANS EXPORTED, 2003

DISTRIBUTION FOR OIL (13% M) — ALL GRADES



Sorghum

Sorghum Grades and Grade Requirements

Sorghum is divided into four classes: Sorghum, Tannin sorghum, White sorghum, and Mixed sorghum. There are no subclasses in sorghum. Each class is divided into four numerical grades and U.S. Sample grade. Special grades are provided to emphasize special qualities or conditions affecting the value of sorghum. Special grades are added to and made a part of the grade designation. They do not affect the numerical or Sample grade designation.

U.S. Standards for Sorghum

Grade	Minimum test weight per bushel (pounds)	Maximum limits of-			
		Damaged kernels		Broken kernels and foreign material	
		Heat-damaged kernels (percent)	Total damaged kernels (percent)	Total (percent)	Foreign material
U.S. No. 1	57.0	0.2	2.0	4.0	1.5
U.S. No. 2	55.0	0.5	5.0	7.0	2.5
U.S. No. 3[1]	53.0	1.0	10.0	10.0	3.5
U.S. No. 4	51.0	3.0	15.0	13.0	4.5
U.S. Sample grade					

U.S. Sample grade is sorghum that:
(a) Does not meet the requirements for the grades U.S. Nos. 1, 2, 3, or 4; or
(b) Contains 8 or more stones which have an aggregate weight in excess of 0.2 percent of the sample weight, 2 or more pieces of glass, 3 or more crotalaria seeds (*Crotalaria* spp.), 2 or more castor beans (*Ricinus communis L.*), 4 or more particles of an unknown foreign substance(s) or a commonly recognized harmful or toxic substance(s), 8 or more cockleburs (*Xanthium* spp.) or similar seeds singly or in combination, 10 or more rodent pellets, bird droppings, or equivalent quantity of other animal filth; or
(c) Has a musty, sour, or commercially objectionable foreign odor (except smut odor); or
(d) Is badly weathered, heating, or of distinctly low quality.

[1] Sorghum which is distinctly discolored shall grade not higher than U.S. No. 3.

Definitions

Test weight (lb/bu) is pounds of grain per Winchester bushel (2.150.42 cubic inches) as determined using an approved device before the removal of dockage.

Test weight (kg/hl) is the metric system equivalent to pounds per bushel. Kilograms per hectoliter are calculated by multiplying pounds per bushel by 1.287.

Heat-damaged kernels are kernels, pieces of sorghum kernels, and other grains that are materially discolored and damaged by heat.

Damaged kernels are kernels, pieces of sorghum kernels, and other grains that are badly ground-damaged, badly weather-damaged, diseased, frost-damaged, germ-damaged, heat-damaged, insect-bored, mold-damaged, sprout-damaged, or otherwise materially damaged.

Foreign material is all matter except sorghum, which passes over the number 6 riddle and all matter other than sorghum that remains on the top of the 5/64 triangular-hole sieve.

Broken kernels are all matter which passes through a 5/64 triangular-hole sieve and over a 2.5/64 round-hole sieve.

Broken kernels and foreign material consists of the combination of broken kernels and foreign material.

Dockage is all matter other than sorghum that can be removed from the original sample by use of an approved device. Also, underdeveloped, shriveled, and small pieces of sorghum kernels removed in properly separating the material other than sorghum.

Moisture is the water content of grain as determined by an approved moisture meter. The percentage of moisture in a sample does not affect the numerical grade.

Mixed sorghum is a sorghum which does not meet the minimum requirements for any of the classes of sorghum, Tannin sorghum or White sorghum.

Table 14. U.S. Sorghum Exports: Number of lots and quantity exported by class and grade, 2001-2003

Class	Grade	2001		2002		2003	
		Number of Lots	Metric Tons	Number of Lots	Metric Tons	Number of Lots	Metric Tons
Yellow Sorghum	U.S. No. 1	1	4,027	–	–	–	–
	U.S. No. 2	265	3,713,702	302	3,836,574	276	3,481,474
	U.S. No. 3	1	5,601	–	–	1	2,567
	All lots	267	3,723,330	302	3,836,574	277	3,484,041
All Classes	U.S. No. 1	1	4,027	–	–	–	–
	U.S. No. 2	265	3,713,702	302	3,836,574	276	3,481,474
	U.S. No. 3	1	5,601	–	–	1	2,567
	All lots	267	3,723,330	302	3,836,574	277	3,484,041

-- = No lots reported in this category.

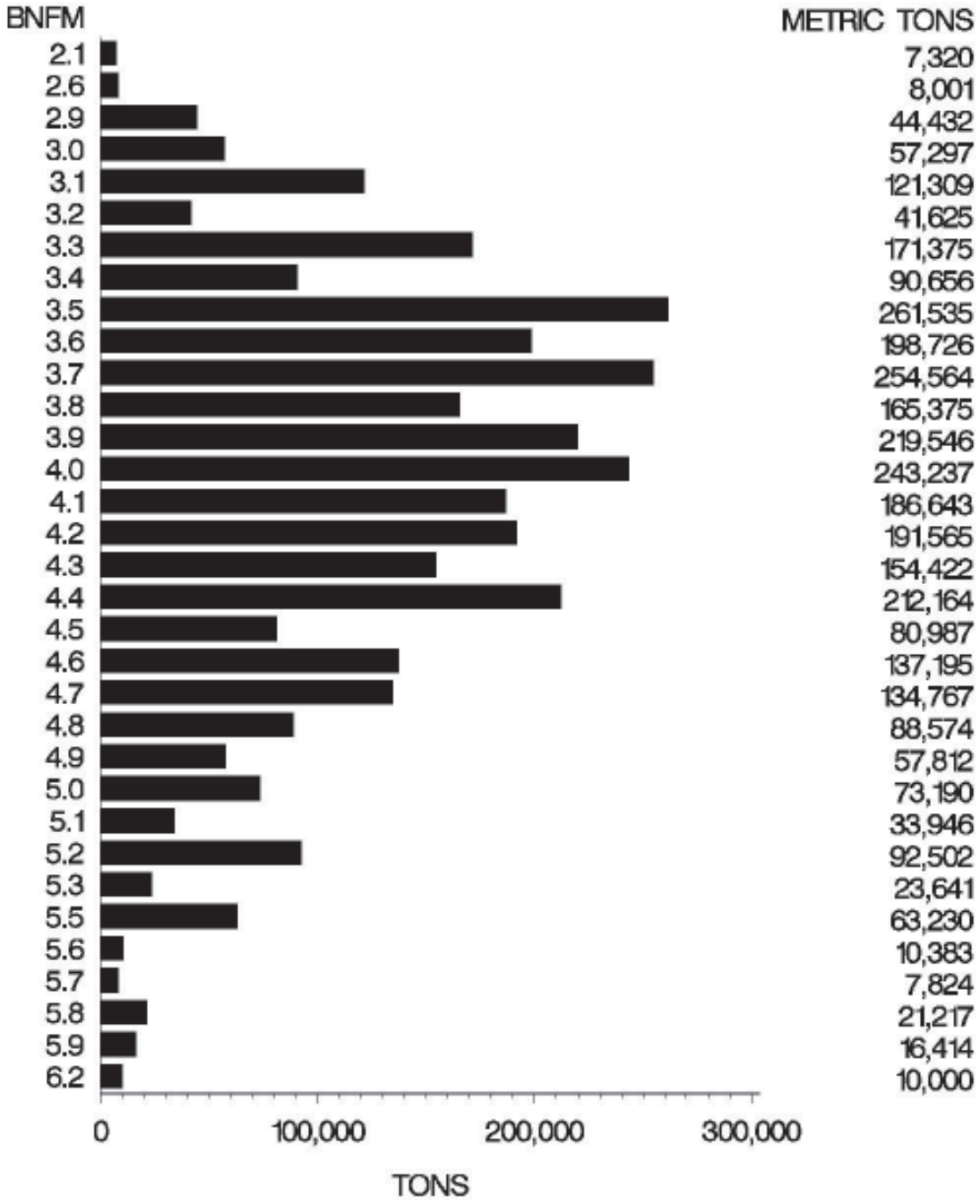
Table 15. Summary of export Sorghum quality, 2001-2003

Factor	Grade	Grade Limit	2001 No. of Lots	2001 Avg.	2001 Low	2001 High	2002 No. of Lots	2002 Avg.	2002 Low	2002 High	2003 No. of Lots	2003 Avg.	2003 Low	2003 High
Test Weight (lb/bu)	**U.S. No. 1**	57.0	1	57.8	57.8	57.8	–	–	–	–	–	–	–	–
	U.S. No. 2	55.0	265	58.0	55.3	60.3	302	58.1	55.8	59.9	276	58.0	56.3	60.5
	U.S. No. 3	53.0	1	58.7	58.7	58.7	–	–	–	–	1	59.1	59.1	59.1
	All lots	N/A	267	58.0	55.3	60.3	302	58.1	55.8	59.9	277	58.0	56.3	60.5
Test Weight (kg/hl)	**U.S. No. 1**	N/A	1	74.4	74.4	74.4	–	–	–	–	–	–	–	–
	U.S. No. 2	N/A	265	74.7	71.2	77.6	302	74.8	71.8	77.2	276	74.7	72.5	77.9
	U.S. No. 3	N/A	1	75.5	75.5	75.5	–	–	–	–	1	76.1	76.1	76.1
	All lots	N/A	267	74.7	71.2	77.6	302	74.8	71.8	77.2	277	74.7	72.5	77.9
Moisture	**U.S. No. 1**	N/A	1	13.4	13.4	13.4	–	–	–	–	–	–	–	–
	U.S. No. 2	N/A	265	13.2	11.3	14.0	302	13.5	12.1	14.4	276	13.6	12.7	14.0
	U.S. No. 3	N/A	1	12.4	12.4	12.4	–	–	–	–	1	14.0	14.0	14.0
	All lots	N/A	267	13.2	11.3	14.0	302	13.5	12.1	14.4	277	13.6	12.7	14.0
Heat-damaged Kernels	**U.S. No. 1**	0.2	1	0.0	0.0	0.0	–	–	–	–	–	–	–	–
	U.S. No. 2	0.5	265	0.0	0.0	0.1	302	0.0	0.0	0.2	276	0.0	0.0	0.1
	U.S. No. 3	1.0	1	0.0	0.0	0.0	–	–	–	–	1	0.0	0.0	0.0
	All lots	N/A	267	0.0	0.0	0.1	302	0.0	0.0	0.2	277	0.0	0.0	0.1
Damaged Kernels (Total)	**U.S. No. 1**	2.0	1	0.4	0.4	0.4	–	–	–	–	–	–	–	–
	U.S. No. 2	5.0	265	1.2	0.1	4.8	302	1.7	0.2	4.8	276	1.8	0.2	5.0
	U.S. No. 3	10.0	1	0.9	0.9	0.9	–	–	–	–	1	7.8	7.8	7.8
	All lots	N/A	267	1.2	0.1	4.8	302	1.7	0.2	4.8	277	1.8	0.2	7.8
Broken Kernels and Foreign Material	**U.S. No. 1**	4.0	1	3.8	3.8	3.8	–	–	–	–	–	–	–	–
	U.S. No. 2	7.0	265	4.1	2.1	6.0	302	4.0	1.4	6.1	276	4.1	2.1	6.2
	U.S. No. 3	10.0	1	5.6	5.6	5.6	–	–	–	–	1	3.8	3.8	3.8
	All lots	N/A	267	4.1	2.1	6.0	302	4.0	1.4	6.1	277	4.1	2.1	6.2
Broken Kernels	**U.S. No. 1**	N/A	–	–	–	–	–	–	–	–	–	–	–	–
	U.S. No. 2	N/A	41	2.7	1.6	3.4	27	2.3	1.8	4.0	29	2.6	0.8	3.4
	U.S. No. 3	N/A	–	–	–	–	–	–	–	–	–	–	–	–
	All lots	N/A	41	2.7	1.6	3.4	27	2.3	1.8	4.0	29	2.6	0.8	3.4
Foreign Material	**U.S. No. 1**	1.5	1	0.9	0.9	0.9	–	–	–	–	–	–	–	–
	U.S. No. 2	2.5	265	1.1	0.0	2.3	302	1.0	0.0	2.4	276	1.1	0.0	2.4
	U.S. No. 3	3.5	1	3.4	3.4	3.4	–	–	–	–	1	1.1	1.1	1.1
	All lots	N/A	267	1.1	0.0	3.4	302	1.0	0.0	2.4	277	1.1	0.0	2.4
Dockage	**U.S. No. 1**	N/A	1	0.1	0.1	0.1	–	–	–	–	–	–	–	–
	U.S. No. 2	N/A	257	0.2	0.1	0.7	296	0.2	0.1	0.5	271	0.2	0.1	0.6
	U.S. No. 3	N/A	–	–	–	–	–	–	–	–	1	0.2	0.2	0.2
	All lots	N/A	258	0.2	0.1	0.7	296	0.2	0.1	0.5	272	0.2	0.1	0.6

N/A = Does not apply.
-- = No lots reported in this category.

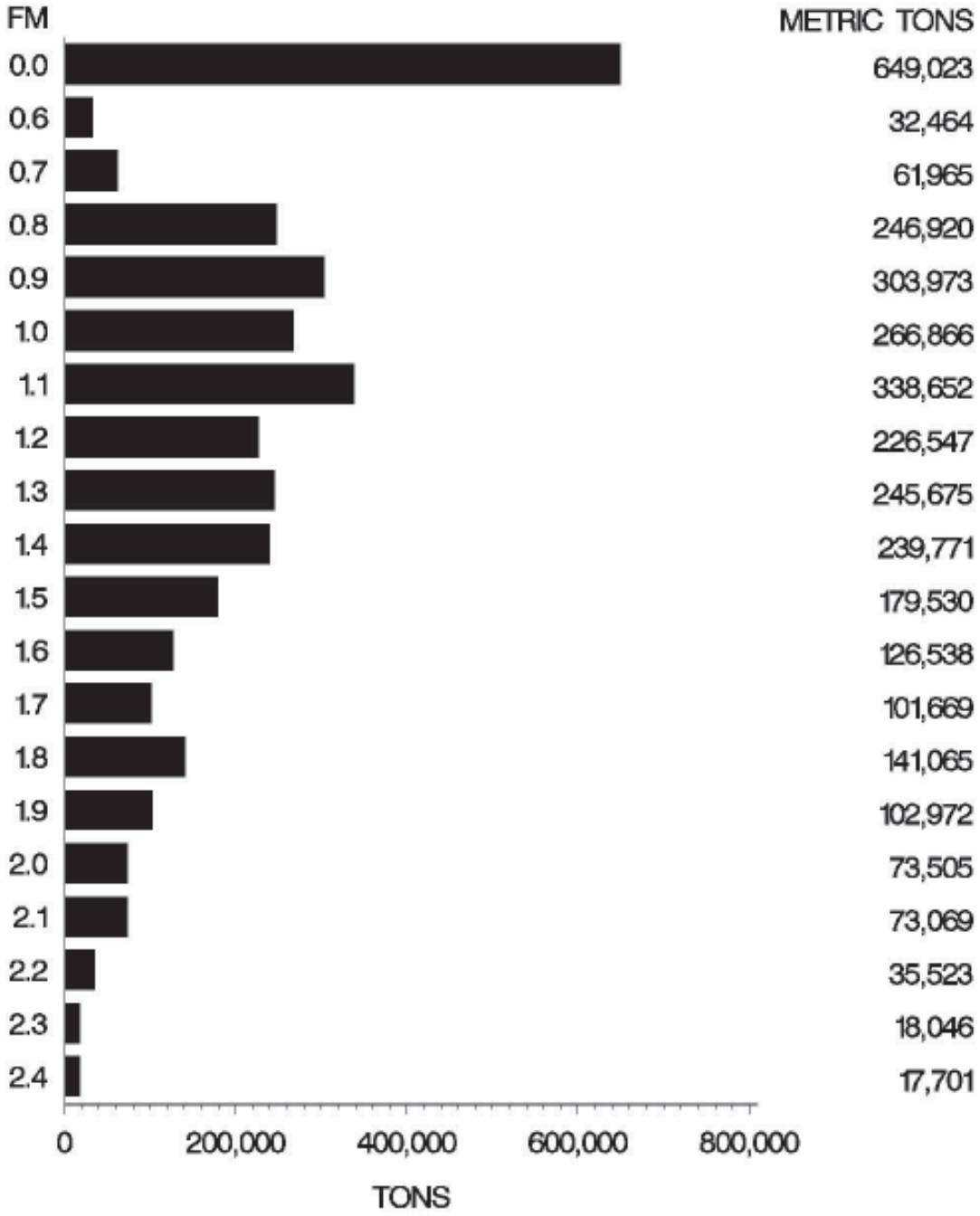
U.S. SORGHUM EXPORTED, 2003

DISTRIBUTION FOR BNFM — GRADE 2



U.S. SORGHUM EXPORTED, 2003

DISTRIBUTION FOR FM — GRADE 2



Barley

Barley Grades and Grade Requirements*

Barley is divided into two classes: Malting barley and Barley. The class Malting barley is divided into three subclasses: Six-Rowed Malting Barley, Six-Rowed Blue Malting barley, and Two-Rowed Malting barley. The class Barley is divided into three subclasses: Six Rowed barley, Two-Rowed barley, and Barley. The applicant for service may request either the malting standards or barley standards for malting types.

* The United States Standards for Barley were revised effective June 1, 1997. The former standards appear in the *1996 U.S. Grain Exports: Quality Report*.

Grades and grade requirements for Six-rowed Malting barley and Six-rowed Blue Malting barley

Grade	Minimum limits of-			Maximum limits of-				
	Test weight per bushel (pounds)	Suitable malting type (percent)	Sound barley[1] (percent)	Damaged kernels[1] (percent)	Foreign Material (percent)	Other grains (percent)	Skinned and broken kernels (percent)	Thin barley[2] (percent)
U.S. No. 1	47.0	95.0	97.0	2.0	0.5	2.0	4.0	7.0
U.S. No. 2	45.0	95.0	94.0	3.0	1.0	3.0	6.0	10.0
U.S. No. 3	43.0	95.0	90.0	4.0	2.0	5.0	8.0	15.0
U.S. No. 4	43.0	95.0	87.0	5.0	3.0	5.0	10.0	15.0

1 Injured-by-frost kernels and injured-by-mold kernels are not considered damaged kernels or considered against sound barley.
2 Using a 5.5/64 x 3/4 slotted-hole sieve.

NOTE: Malting barley shall not be infested, blighted, ergoty, garlicky, smutty, or contain any special grades. Upon request, malting barley varieties may be inspected and graded in accordance with standards established for the class Barley.

Six-rowed Malting and Six-rowed Blue Malting barley that does not meet the requirements for U.S. Nos. 1, 2, 3, or 4 Malting shall be graded under the Barley standards.

Grades and grade requirements for Two-rowed Malting barley

Grade	Minimum limits of-			Maximum limits of-			
	Test weight per bushel (pounds)	Suitable malting type (percent)	Sound barley[1] (percent)	Wild Oats (percent)	Foreign Material (percent)	Skinned and broken kernels (percent)	Thin barley[2] (percent)
U.S. No. 1	50.0	97.0	98.0	1.0	0.5	5.0	5.0
U.S. No. 2	48.0	97.0	98.0	1.0	1.0	7.0	7.0
U.S. No. 3	48.0	95.0	96.0	2.0	2.0	10.0	10.0
U.S. No. 4	48.0	95.0	93.0	3.0	3.0	10.0	10.0

1 Injured-by-frost kernels and injured-by-mold kernels are not considered damaged kernels or considered against sound barley.
2 Using a 5.5/64 x 3/4 slotted-hole sieve.

NOTE: Malting barley shall not be infested, blighted, ergoty, garlicky, smutty, or contain any special grades. Upon request, malting barley varieties may be inspected and graded in accordance with standards established for the class Barley.

Two-rowed barley that does not meet the requirements for U.S. Nos. 1, 2, 3, or 4 Malting shall be graded under the Barley standards.

Grades and grade requirements for Barley

Grade	Minimum limits of-		Maximum limits of-				
	Test weight per bushel (pounds)	Sound barley (percent)	Damaged kernels[1] (percent)	Heat-damaged kernels (percent)	Foreign Material (percent)	Broken kernels (percent)	Thin barley[2] (percent)
U.S. No. 1	47.0	97.0	2.0	0.2	1.0	4.0	10.0
U.S. No. 2	45.0	94.0	4.0	0.3	2.0	8.0	15.0
U.S. No. 3	43.0	90.0	6.0	0.5	3.0	12.0	25.0
U.S. No. 4	40.0	85.0	8.0	1.0	4.0	18.0	35.0
U.S. No. 5	36.0	75.0	10.0	3.0	5.0	28.0	75.0
U.S. Sample Grade							

U.S. Sample grade shall be barley that:
(a) Does not meet the requirements for the grades U.S. No. 1, 2, 3, 4, or 5; or
(b) Contains 8 or more stones or any number of stones which have an aggregate weight in excess of 0.2 percent of the sample weight, 2 or more pieces of glass, 3 or more crotalaria seeds (*Crotalaria* spp.), 2 or more castor beans (*Ricinus communis* L.), 4 or more particles of an unknown foreign substance(s) or a commonly recognized harmful or toxic substance(s), 8 or more cocklebur (*Xanthium* spp.) or similar seeds singly or in combination, 10 or more rodent pellets, bird droppings, or equivalent quantity of other animal filth per 1-1/8 to 1-1/4 quarts of barley; or
(c) Has a musty, sour, or commercially objectionable foreign odor (except smut or garlic odor); or
(d) Is heating or otherwise of distinctly low quality.

1 Includes heat-damaged kernels. Injured-by-frost kernels and injured-by-mold kernels are not considered damaged kernels.
2 Using a 5/64 x 3/4 slotted-hole sieve.

Definitions

Test weight (lb/bu) is pounds of grain per Winchester bushel as determined using an approved device on a dockage-free barley sample.

Test weight (kg/hl) is the metric system equivalent to pounds per bushel. Kilograms per hectoliter are calculated by multiplying pounds per bushel by 1.287.

Heat-damaged kernels are kernels and pieces of barley kernels, other grains, and wild oats that are materially discolored and damaged by heat.

Damaged kernels are kernels, pieces of barley kernels, other grains, and wild oats that are badly ground-damaged, badly weather-damaged, diseased, frost-damaged, germ-damaged, heat-damaged, injured-by-heat, insect-bored, mold-damaged, sprout-damaged, or otherwise materially damaged.

Foreign material is all matter other than barley, other grains, and wild oats that remains in the sample after removal of dockage.

Skinned and broken kernels are barley kernels that have one-third or more of the hull removed, or that the hull is loose or missing over the germ, or broken kernels, or whole kernels that have a part or all of the germ missing.

Dockage is all matter other than barley that can be removed from the original sample by use of an approved device. Also, underdeveloped, shriveled, and small pieces of barley kernels removed by properly separating the material other than barley and that cannot be recovered by properly rescreening or recleaning.

Moisture is the water content of grain as determined by an approved moisture meter. The percentage of moisture in a sample does not affect the numerical grade.

Suitable malting type are varieties of malting barley that are recommended by the American Malting Barley Association and any other proprietary malting type(s) used by the malting and brewing industries.

Sound barley is kernels and pieces of barley kernels that are not damaged.

Thin barley is :

Six-rowed Malting barley that passes through a 5/64 x 3/4 slotted-hole sieve and Two-rowed Malting barley that passes through a 5.5/64 x 3/4 slotted-hole sieve.

Six-rowed barley, Two-rowed barley, or Barley that passes through a 5/64 x 3/4 slotted-hole sieve.

Table 16. U.S. Barley Exports: Number of lots and quantity exported by class and grade, 2001-2003

Class	Grade	2001		2002		2003	
		Number of Lots	Metric Tons	Number of Lots	Metric Tons	Number of Lots	Metric Tons
	U.S. No. 2	56	610,061	37	302,912	35	434,022
	U.S. No. 3	10	77,852	--	--	5	60,574
	U.S. No. 4	3	24,960	10	34,703	4	12,805
	All lots	69	712,873	47	337,615	44	507,401

-- = No lots reported in this category.

Table 17. Summary of export Barley quality, 2001-2003

Factor	Grade	Grade Limit	2001 No. of Lots	2001 Avg.	2001 Low	2001 High	2002 No. of Lots	2002 Avg.	2002 Low	2002 High	2003 No. of Lots	2003 Avg.	2003 Low	2003 High
Test Weight (lb/bu)	**U.S. No. 2**	45.0	56	51.8	46.0	55.6	37	52.6	50.1	58.5	35	51.0	49.5	53.4
	U.S. No. 3	43.0	10	49.9	46.3	52.5	–	–	–	–	5	51.3	50.0	54.1
	U.S. No. 4	43.0	3	52.9	52.3	53.1	10	54.3	51.7	56.3	4	52.8	51.1	56.0
	All lots	N/A	69	51.6	46.0	55.6	47	52.8	50.1	58.5	44	51.1	49.5	56.0
Test Weight (kg/hl)	**U.S. No. 2**	N/A	56	66.7	59.2	71.6	37	67.7	64.4	75.3	35	65.7	63.7	68.7
	U.S. No. 3	N/A	10	64.2	59.6	67.6	–	–	–	–	5	66.0	64.4	69.6
	U.S. No. 4	N/A	3	68.1	67.3	68.4	10	69.8	66.6	72.4	4	68.0	65.8	72.1
	All lots	N/A	69	66.5	59.2	71.6	47	67.9	64.4	75.3	44	65.8	63.7	72.1
Moisture	**U.S. No. 2**	N/A	56	11.0	9.8	12.9	37	10.8	9.9	12.0	35	10.7	9.7	11.6
	U.S. No. 3	N/A	10	11.6	106	12.7	–	–	–	–	5	11.0	10.6	11.3
	U.S. No. 4	N/A	3	12.8	12.4	13.0	10	11.7	10.8	13.1	4	12.7	11.2	13.4
	All lots	N/A	69	11.1	9.8	13.0	47	10.9	9.9	13.1	44	10.8	9.7	13.4
Heat-damaged Kernels	**U.S. No. 2**	0.3	56	0.0	0.0	0.0	37	0.0	0.0	0.0	35	0.0	0.0	0.0
	U.S. No. 3	0.5	10	0.0	0.0	0.0	–	–	–	–	5	0.0	0.0	0.0
	U.S. No. 4	1.0	3	0.0	0.0	0.0	10	0.0	0.0	0.0	4	0.0	0.0	0.0
	All lots	N/A	69	0.0	0.0	0.0	47	0.0	0.0	0.0	44	0.0	0.0	0.0
Damaged Kernels (Total)	**U.S. No. 2**	4.0	56	0.3	0.0	1.2	37	0.3	0.0	2.5	35	0.3	0.0	1.3
	U.S. No. 3	6.0	10	1.0	0.2	2.8	–	–	–	–	5	0.3	0.0	0.6
	U.S. No. 4	8.0	3	0.2	0.2	0.3	10	0.1	0.0	0.5	4	0.3	0.1	0.3
	All lots	N/A	69	0.4	0.0	2.8	47	0.3	0.0	2.5	44	0.3	0.0	1.3
Foreign Material	**U.S. No. 2**	2.0	56	0.1	0.0	0.3	37	0.1	0.0	0.7	35	0.1	0.0	0.4
	U.S. No. 3	3.0	10	0.1	0.0	0.3	–	–	–	–	5	0.1	0.0	0.1
	U.S. No. 4	4.0	3	0.0	0.0	0.1	10	0.0	0.0	0.1	4	0.0	0.0	0.1
	All lots	N/A	69	0.1	0.0	0.3	47	0.1	0.0	0.7	44	0.1	0.0	0.4
Sound Barley	**U.S. No. 2**	94.0	56	98.7	95.0	100.0	37	99.0	96.4	100.0	35	98.8	96.7	99.9
	U.S. No. 3	90.0	10	97.5	96.2	99.3	–	–	–	–	5	99.5	99.3	99.8
	U.S. No. 4	87.0	3	99.5	99.3	99.6	10	99.6	99.2	100.0	4	99.6	99.3	99.9
	All lots	N/A	69	98.6	95.0	100.0	47	99.1	96.4	100.0	44	98.9	96.7	99.9
Thin Barley	**U.S. No. 2**	15.0	56	7.5	2.8	14.0	37	7.4	3.4	13.5	35	8.5	3.2	14.3
	U.S. No. 3	15.0	10	13.5	9.8	19.9	–	–	–	–	5	7.8	7.0	9.5
	U.S. No. 4	15.0	3	0.6	0.0	1.0	10	1.4	0.2	7.6	4	0.6	0.2	1.1
	All lots	N/A	69	7.9	0.0	19.9	47	6.8	0.2	13.5	44	8.2	0.2	14.3

-- = No lots reported in this category.

continued

Table 17. Summary of export Barley quality, 2001-2003 -- Continued

Factor	Grade	Grade Limit	2001 No. of Lots	2001 Avg.	2001 Low	2001 High	2002 No. of Lots	2002 Avg.	2002 Low	2002 High	2003 No. of Lots	2003 Avg.	2003 Low	2003 High
Broken	**U.S. No. 2**	8.0	56	0.0	0.0	0.0	37	0.0	0.0	0.0	35	0.0	0.0	0.0
Kernels	**U.S. No. 3**	12.0	10	0.0	0.0	0.0	–	–	–	–	5	0.0	0.0	0.0
	U.S. No. 4	12.0	3	0.0	0.0	0.0	10	0.0	0.0	0.0	4	0.0	0.0	0.0
	All lots	N/A	69	0.0	0.0	0.0	47	0.0	0.0	0.0	44	0.0	0.0	0.0
Dockage	**U.S. No. 2**	N/A	56	1.2	0.1	2.0	37	1.0	0.3	1.6	35	1.0	0.1	1.3
	U.S. No. 3	N/A	10	1.6	1.3	2.3	–	–	–	–	5	1.1	0.9	1.3
	U.S. No. 4	N/A	3	0.1	0.1	0.1	10	0.2	0.1	0.4	4	0.2	0.1	0.3
	All lots	N/A	69	1.2	0.1	2.3	47	0.9	0.1	1.6	44	1.0	0.1	1.3

N/A = Does not apply.
-- = No lots reported in this category.

Sunflower Seeds

Sunflower Seed Grades and Grade Requirements

There are no classes or subclasses in sunflower seed. Sunflower seed is divided into two U.S. numerical grades and U.S. Sample grade. One special grade is provided to emphasize a special condition affecting the value of sunflower seed and is added to and made a part of the grade designation. The special grade does not affect the numerical or Sample grade designation.

U.S. Standards for Sunflower Seeds

Grade	Minimum test weight per bushel (pounds)	Maximum limits of --		
		Damaged Sunflower Seed		Dehulled seed (percent)
		Heat damaged (percent)	Total (percent)	
U.S. No. 1	25.0	0.5	5.0	5.0
U.S. No. 2	25.0	1.0	10.0	5.0
U.S. Sample Grade				

U.S. Sample grade is sunflower seed that:

(a) Does not meet the requirements for the grades U.S. Nos. 1 or 2; or

(b) Contains 8 or more stones which have an aggregate weight in excess of 0.20 percent of the sample weight, 2 or more pieces of glass, 3 or more crotalaria seeds (*Crotalaria* spp.), 2 or more castor beans (*Ricinus communis* L.), 4 or more particles of an unknown foreign substance(s), or a commonly recognized harmful or toxic substance(s), 10 or more rodent pellets, bird droppings, or equivalent quantity of other animal filth per 600 grams of sunflower seed; or

(c) Has a musty, sour or commercially objectionable foreign odor; or

(d) Is heating or otherwise of distinctly low quality.

Definitions

Test weight (lb/bu) is pounds of grain per Winchester bushel as determined by an approved device after the removal of mechanically separated foreign material.

Test weight (kg/hl) is the metric system equivalent to pounds per bushel. Kilograms per hectoliter are calculated by multiplying pounds per bushel by 1.287.

Heat-damaged sunflower seeds are seeds and pieces of sunflower seed that are materially discolored and damaged by heat.

Damaged sunflower seed is seed and pieces of sunflower seed that are badly ground-damaged, badly weather-damaged, diseased, frost-damaged, heat-damaged, mold-damaged, sprout-damaged, or otherwise materially damaged.

Dehulled seed is sunflower seed that has the hull completely removed from the sunflower kernel.

Foreign material is all matter other than whole sunflower seeds containing kernels that can be removed from the original sample by use of an approved device and by handpicking a portion of the sample.

Admixture consists of all material other than sunflower seed which can be removed from a test portion by handsieving and handpicking. Empty hulls and parts of seed are considered sunflower seed.

Moisture is the water content of grain as determined by an approved electronic moisture meter. The percentage of moisture in a sample does not affect the numerical grade.

Table 18. U.S. Sunflower Seed Exports: Number of lots and quantity exported by class and grade, 2001-2003

	2001		2002		2003	
	Number of Lots	Metric Tons	Number of Lots	Metric Tons	Number of Lots	Metric Tons
U.S. No. 1	3	43,405	–	–	–	–
All lots	3	43,405	–	–	–	–

— = No lots reported in this category.

Table 19. Summary of export Sunflower Seed quality, 2001-2003

			2001				2002				2003			
Factor	Grade	Grade Limit	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High
Test Weight (lb/bu)	**U.S. No. 1**	25.0	3	30.2	29.6	30.9	–	–	–	–	–	–	–	–
	All lots	N/A	3	30.2	29.6	30.9	–	–	–	–	–	–	–	–
Test Weight (kg/hl)	**U.S. No. 1**	N/A	3	38.9	38.1	39.8	–	–	–	–	–	–	–	–
	All lots	N/A	3	38.9	38.1	39.8	–	–	–	–	–	–	–	–
Moisture	**U.S. No. 1**	N/A	3	8.6	8.2	8.9	–	–	–	–	–	–	–	–
	All lots	N/A	3	8.6	8.2	8.9	–	–	–	–	–	–	–	–
Heat-damaged Sunflower Seed	**U.S. No. 1**	0.5	3	0.1	0.0	0.2	–	–	–	–	–	–	–	–
	All lots	N/A	3	0.1	0.0	0.2	–	–	–	–	–	–	–	–
Damaged Sunflower Seed (Total)	**U.S. No. 1**	5.0	3	0.8	0.3	1.7	–	–	–	–	–	–	–	–
	All lots	N/A	3	0.8	0.3	1.7	–	–	–	–	–	–	–	–
Dockage	**U.S. No. 1**	N/A	–	–	–	–	–	–	–	–	–	–	–	–
	All lots	N/A	–	–	–	–	–	–	–	–	–	–	–	–
Dehulled Seed	**U.S. No. 1**	5.0	3	1.7	0.0	4.5	–	–	–	–	–	–	–	–
	All lots	N/A	3	1.7	0.0	4.5	–	–	–	–	–	–	–	–
Admixture	**U.S. No. 1**	N/A	3	1.5	0.0	4.6	–	–	–	–	–	–	–	–
	All lots	N/A	3	1.5	0.0	4.6	–	–	–	–	–	–	–	–

N/A = Does not apply.

-- = No lots reported in this category.

Canola

Canola Grades and Grade Requirements

There are no classes of canola. Canola is divided into three numerical grades and U.S. Sample grade. Special grades are provided to emphasize special qualities or conditions affecting the value, and are added to and made a part of the grade designation. They do not affect the numerical or sample grade designation.

U.S. Standards for Canola

Grade	Maximum percent limits of--								Maximum count limits of--		
	Damaged Kernels			Conspicuous Admixture				Inconspicous Admixture	Other material		
	Heat damaged (percent)	Distinctly green (percent)	Total (percent)	Ergot (percent)	Sclerotinia (percent)	Stones (percent)	Total (percent)		Animal Filth	Glass	Unknown Foreign Substance
U.S. No. 1	0.1	2.0	3.0	0.05	0.05	0.05	1.0	5.0	3	0	1
U.S. No. 2	0.5	6.0	10.0	0.05	0.10	0.05	1.5	5.0	3	0	1
U.S. No. 3	2.0	20.0	20.0	0.05	0.15	0.05	2.0	5.0	3	0	1
U.S. Sample Grade											

U.S. Sample grade is canola that:
(a) Does not meet the requirements for U.S. Nos. 1, 2, or 3; or
(b) Has a musty, sour, or commercially objectionable foreign odor; or
(c) Is heating or otherwise of distinctly low quality.

Definitions

Conspicuous admixture is all matter other than canola including, but not limited to, ergot, sclerotinia, and stones, which is conspicuous and readily distinguishable from canola and which remains in the sample after the removal of machine separated dockage. Conspicuous admixture is added to machine separated dockage in the computation of total dockage.

Damaged kernels are canola and pieces of canola that are heat-damaged, sprout-damaged, mold-damaged, distinctly green-damaged, frost-damaged, rime-damaged, or otherwise materially damaged.

Distinctly green kernels are canola and pieces of canola which, after being crushed, exhibit a distinctly green color.

Dockage is all matter other than canola that can be removed from the original sample by use of an approved device according to procedures described in FGIS instructions. Also, underdeveloped, shriveled, and small pieces of canola kernels that cannot be recovered by properly screening or recleaning. Machine separated dockage is added to conspicuous admixture in the computation of total dockage.

Ergot is sclerotia of the fungus, *Clavicepts* species, which are associated with some seeds other than canola where the fungal organism has replaced the seed.

Heat-damaged kernels are canola and pieces of canola which, after being crushed, exhibit that they are discolored and damaged by heat.

Inconspicuous admixture is any seed which is difficult to distinguish from canola. This includes, but is not limited to, common wild mustard (*Brassica kaber* and *B. juncea*), domestic brown mustard (*Brassica juncea)*, yellow mustard (*B. hirta)*, and seed other than the mustard group.

Sclerotia are dark colored or black resting bodies of the *Sclerotinia* and *Claviceps*.

Sclerotinia is the genus name which includes the fungus *Sclerotinia sclerotiorum* which produces sclerotia. Canola is only infrequently infected, and the sclerotia, unlike sclerotia of ergot, are usually associated with the stem of the plants.

Table 20. U.S. Canola Exports: Number of lots and quantity exported by class and grade, 2001-2003

	2001		2002		2003	
	Number of Lots	Metric Tons	Number of Lots	Metric Tons	Number of Lots	Metric Tons
U.S. No. 1	1	19,155	–	–	–	–
All lots	1	19,155	–	–	–	–

-- = No lots reported in this category.

Table 21. Summary of export Canola quality, 2001-2003

Factor	Grade	Grade Limit	2001 No. of Lots	2001 Avg.	2001 Low	2001 High	2002 No. of Lots	2002 Avg.	2002 Low	2002 High	2003 No. of Lots	2003 Avg.	2003 Low	2003 High
Dockage	**U.S. No. 1**	N/A	1	4.8	4.8	4.8	–	–	–	–	–	–	–	–
	All lots	N/A	1	4.8	4.8	4.8	–	–	–	–	–	–	–	–
Moisture	**U.S. No. 1**	N/A	1	7.1	7.1	7.1	–	–	–	–	–	–	–	–
	All lots	N/A	1	7.1	7.1	7.1	–	–	–	–	–	–	–	–
Heat damaged Kernels	**U.S. No. 1**	0.1	1	0.0	0.0	0.0	–	–	–	–	–	–	–	–
	All lots	N/A	1	0.0	0.0	0.0	–	–	–	–	–	–	–	–
Distinctly green kernels	**U.S. No. 1**	2.0	1	1.0	1.0	1.0	–	–	–	–	–	–	–	–
	All lots	N/A	1	1.0	1.0	1.0	–	–	–	–	–	–	–	–
Total damaged kernels	**U.S. No. 1**	3.0	1	1.3	1.3	1.3	–	–	–	–	–	–	–	–
	All lots	N/A	1	1.3	1.3	1.3	–	–	–	–	–	–	–	–
Ergot	**U.S. No. 1**	0.05	1	0.0	0.0	0.0	–	–	–	–	–	–	–	–
	All lots	N/A	1	0.0	0.0	0.0	–	–	–	–	–	–	–	–
Sclerotinia	**U.S. No. 1**	0.05	1	0.0	0.0	0.0	–	–	–	–	–	–	–	–
	All lots	N/A	1	0.0	0.0	0.0	–	–	–	–	–	–	–	–
Stones	**U.S. No. 1**	0.05	1	0.0	0.0	0.0	–	–	–	–	–	–	–	–
	All lots	N/A	1	0.0	0.0	0.0	–	–	–	–	–	–	–	–
Total conspicuous admixture	**U.S. No. 1**	1.0	1	0.5	0.5	0.5	–	–	–	–	–	–	–	–
	All lots	N/A	1	0.5	0.5	0.5	–	–	–	–	–	–	–	–
Inconspicuous admixture	**U.S. No. 1**	5.0	1	0.0	0.0	0.0	–	–	–	–	–	–	–	–
	All lots	N/A	1	0.0	0.0	0.0	–	–	–	–	–	–	–	–

N/A = Does not apply.
-- = No lots reported in this category.

Flaxseed

Flaxseed Grades and Grade Requirements

There are no classes of flaxseed. Flaxseed is divided into two numerical grades and U.S. Sample grade. Other determinations not specifically provided for under the general provisions are made on the basis of the grain when free from dockage, except the determination of odor is made on either the basis of the grain as a whole or the grain when free from dockage.

U.S. Standards for Flaxseed

Grade	Minimum test weight per bushel (pounds)	Maximum limits of damaged kernels	
		Heat damaged kernels (percent)	Total (percent)
U.S. No. 1	49.0	0.2	10.0
U.S. No. 2	47.0	0.5	15.0
U.S. Sample Grade			

U.S. Sample grade is flaxseed that:
(a) Does not meet the requirements for the grades U.S. Nos. 1 or 2; or
(b) Contains 8 or more stones which have an aggregate weight in excess of 0.2 percent of the sample weight, 2 or more pieces of glass, 3 or more crotalaria seeds (*Crotalaria* spp.), 2 or more castor beans (*Ricinus communis* L.), 4 or more particles of an unknown foreign substance(s) or a commonly recognized harmful or toxic substance(s), 10 or more rodent pellets, bird dropping, or equivalent quantity of other animal filth per 1-1/8 to 1-1/4 quarts of flaxseed; or
(c) Has a musty, sour, or commercially objectionable foreign odor (except smut or garlic odor), or
(d) Is heating or otherwise of distinctly low quality.

Definitions

Flaxseed. Grain that, before the removal of dockage, consists of 50 percent or more of common flaxseed (*Linum usitatissimum* L.) and not more than 20 percent of other grains for which standards have been established under the United States Grain Standards Act and which, after the removal of dockage, contains 50 percent or more of whole flaxseed.

Damaged kernels. Kernels and pieces of flaxseed kernels that are badly grounddamaged, badly weather-damaged, diseased, frost-damaged, germ-damaged, heatdamaged, insect-bored, mold-damaged, sprout-damaged, or otherwise materially damaged.

Dockage. All matter other than flaxseed that can be removed from the original sample by use of an approved device according to procedures prescribed in FGIS instructions. Also, underdeveloped, shriveled, and small pieces of flaxseed kernels removed in properly separating the material other than flaxseed and that cannot be recovered by properly rescreening or recleaning.

Heat-damaged kernels. Kernels and pieces of flaxseed kernels that are materially discolored and damaged by heat.

Other grains. Barley, corn, cultivated buckwheat, einkorn, emmer, guar, hull-less barley, nongrain sorghum, oats, Polish wheat, popcorn, poulard wheat, rice, rye, safflower, sorghum, soybeans, spelt, sunflower seed, sweet corn, triticale, wheat, and wild oats.

Table 22. U.S. Flaxseed Exports: Number of lots and quantity exported by class and grade, 2001-2003

	2001		2002		2003	
	Number of Lots	Metric Tons	Number of Lots	Metric Tons	Number of Lots	Metric Tons
U.S. No. 1	4	56,728	6	69,737	5	48,860
All lots	4	56,728	6	69,737	5	48,860

-- = No lots reported in this category.

Table 23. Summary of export Flaxseed quality, 2001-2003

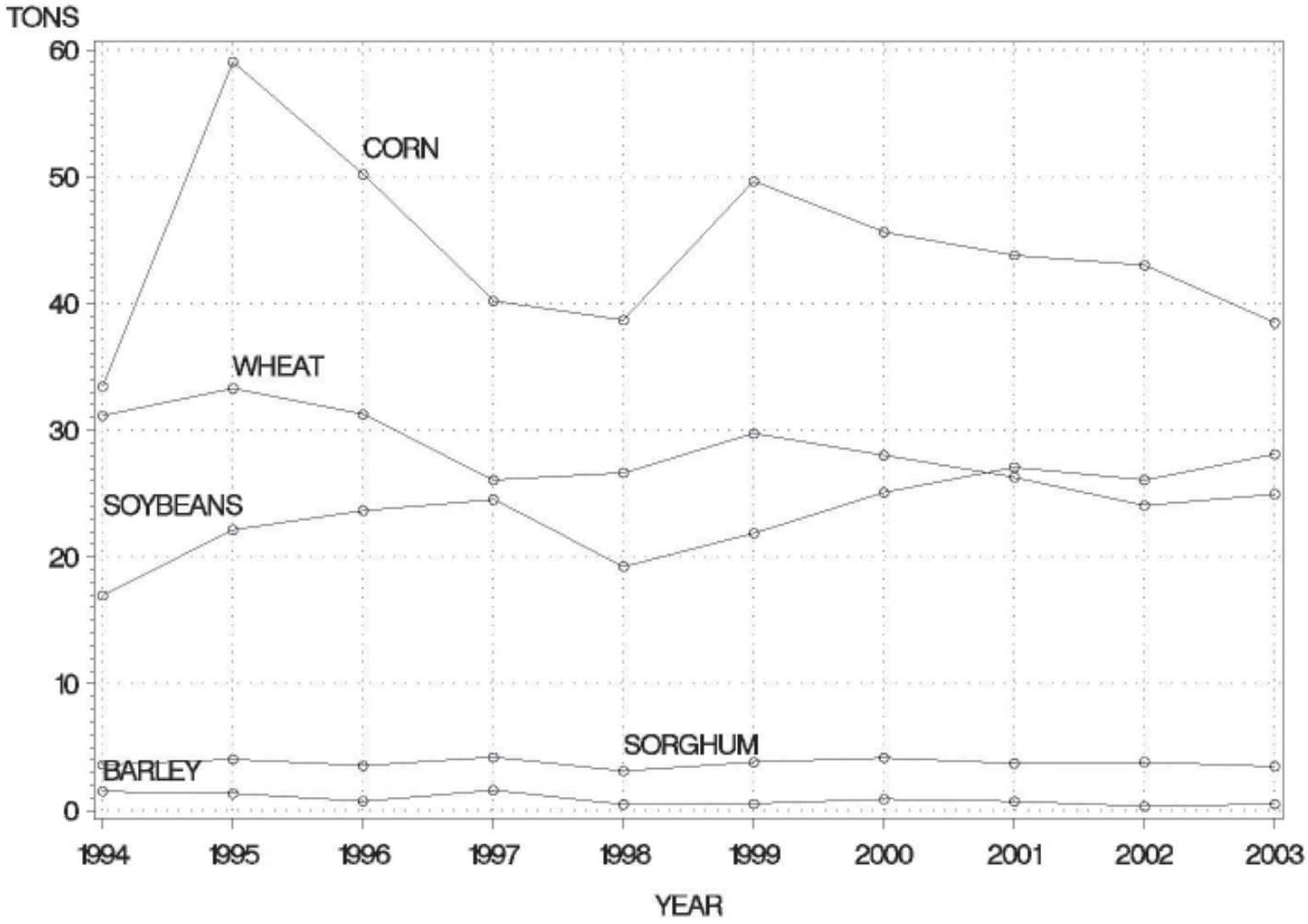
			2001				2002				2003			
Factor	**Grade**	**Grade Limit**	**No. of Lots**	**Avg.**	**Low**	**High**	**No. of Lots**	**Avg.**	**Low**	**High**	**No. of Lots**	**Avg.**	**Low**	**High**
Test Weight (lb/bu)	**U.S. No. 1**	49.0	4	50.2	50.0	50.4	6	49.8	49.6	49.9	5	50.0	49.1	50.1
	All lots	N/A	4	50.2	50.0	50.4	6	49.8	49.6	49.9	5	50.0	49.1	50.1
Test Weight (kg/hl)	**U.S. No. 1**	N/A	4	64.6	64.4	64.9	6	64.1	63.9	64.3	5	64.4	63.2	64.5
	All lots	N/A	4	64.6	64.4	64.9	6	64.1	63.9	64.3	5	64.4	63.2	64.5
Moisture	**U.S. No. 1**	N/A	4	7.3	6.6	7.5	6	7.6	6.9	8.5	5	6.8	6.3	7.6
	All lots	N/A	4	7.3	6.6	7.5	6	7.6	6.9	8.5	5	6.8	6.3	7.6
Heat-damaged kernels	**U.S. No. 1**	0.2	4	0.0	0.0	0.0	6	0.0	0.0	0.0	5	0.0	0.0	0.0
	All lots	N/A	4	0.0	0.0	0.0	6	0.0	0.0	0.0	5	0.0	0.0	0.0
Damaged Flaxseed (Total)	**U.S. No. 1**	10.0	4	0.1	0.0	0.2	6	0.0	0.0	0.1	5	0.0	0.0	0.0
	All lots	N/A	4	0.1	0.0	0.2	6	0.0	0.0	0.1	5	0.0	0.0	0.0
Dockage	**U.S. No. 1**	N/A	4	6.5	6.0	7.2	6	5.9	5.4	7.5	5	5.4	5.0	6.0
	All lots	N/A	4	6.5	6.0	7.2	6	5.9	5.4	7.5	5	5.4	5.0	6.0

N/A = Does not apply.
-- = No lots reported in this category.

Appendix

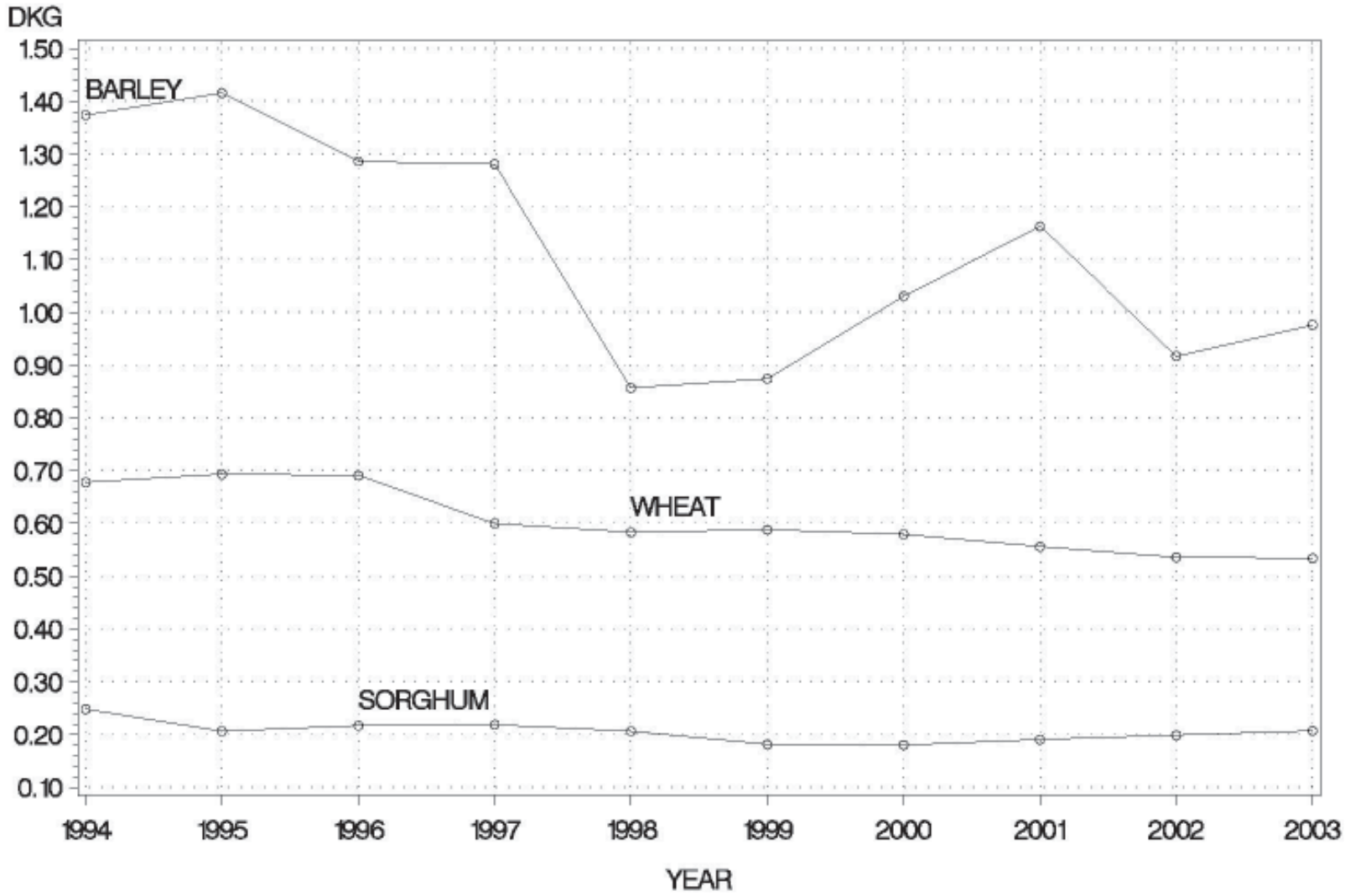
U.S. GRAIN QUANTITY EXPORTED, 1994–2003

METRIC TONS IN MILLIONS



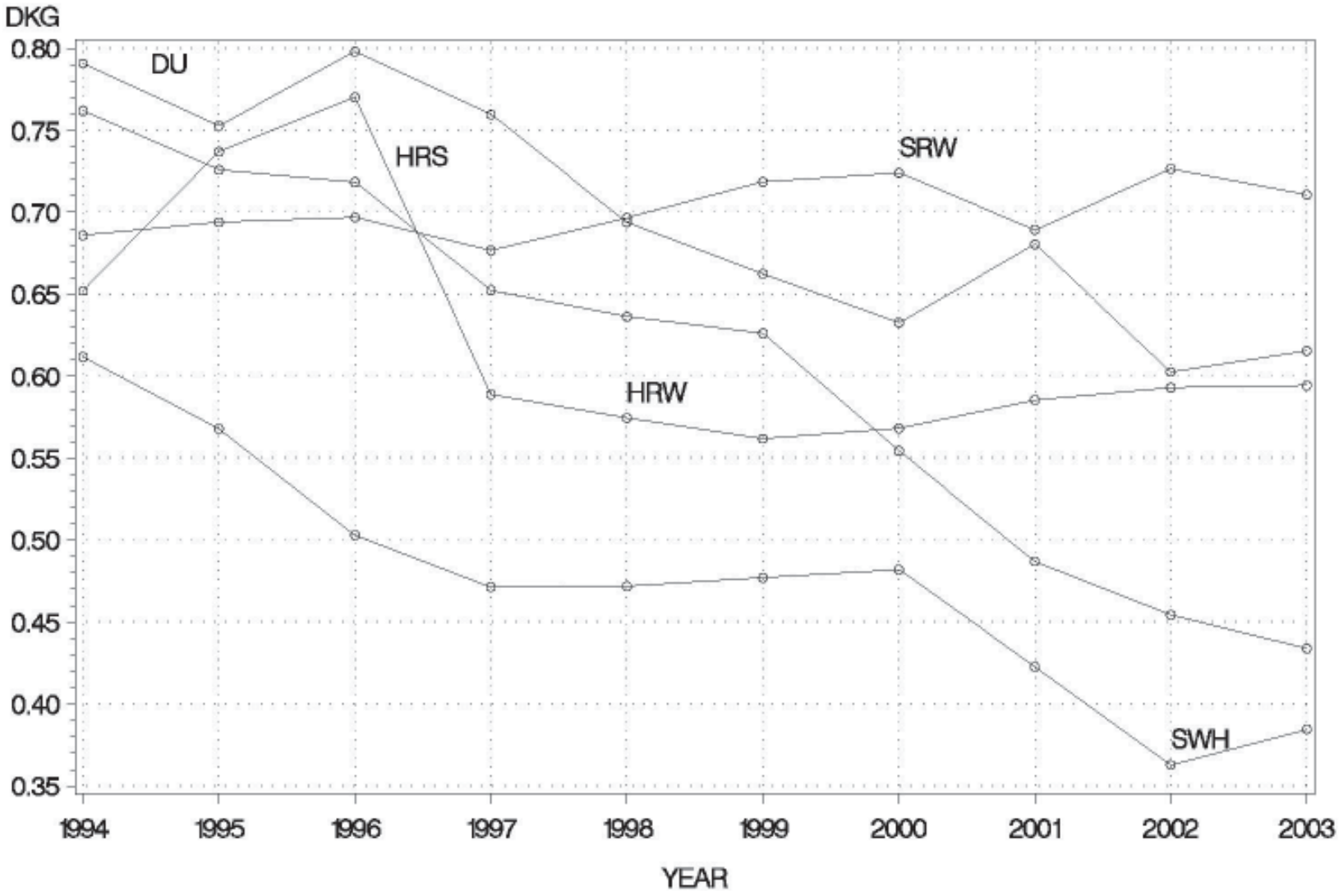
U.S. GRAIN EXPORTED, 1994–2003

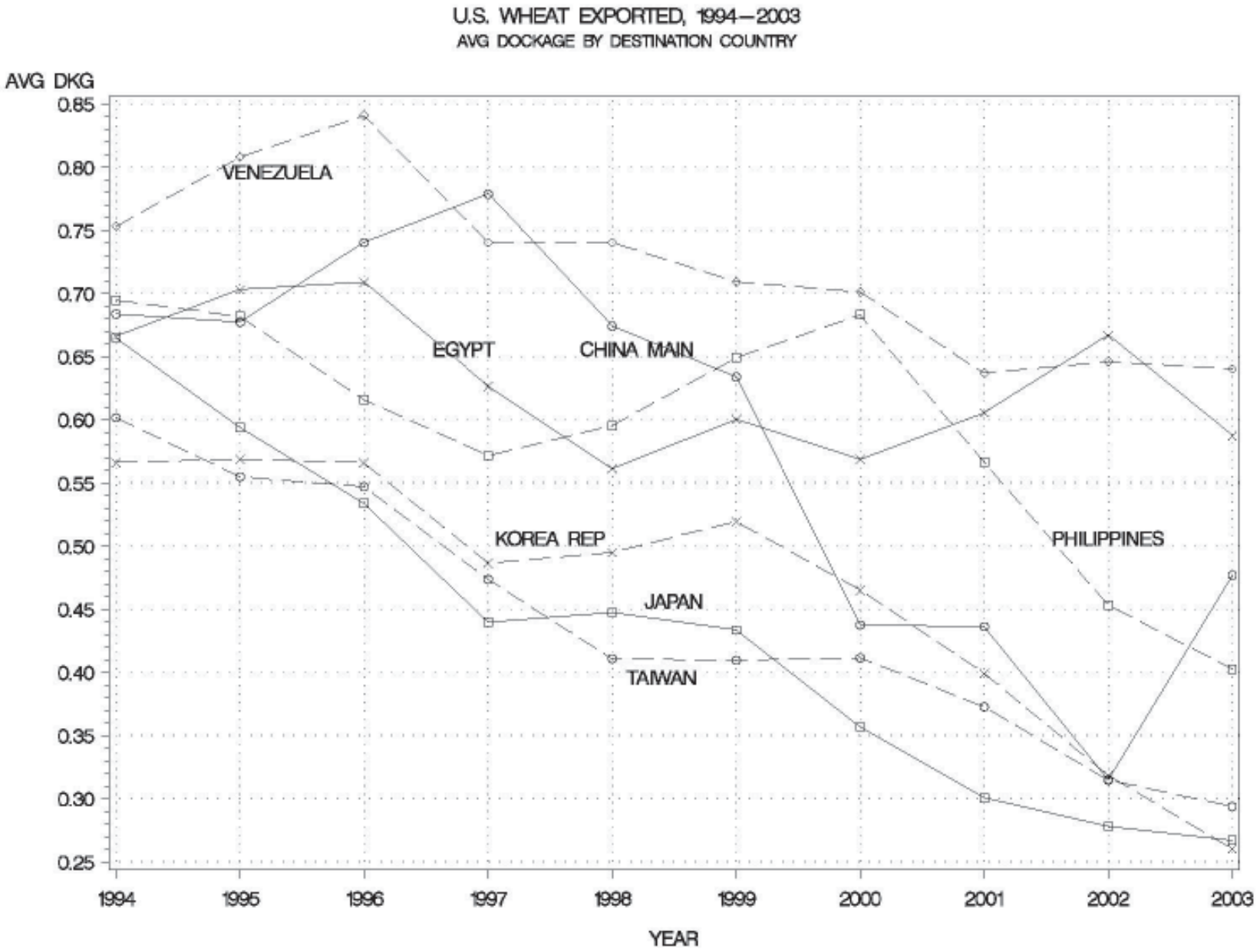
AVG DOCKAGE BY GRAIN



U.S. WHEAT EXPORTED, 1994–2003

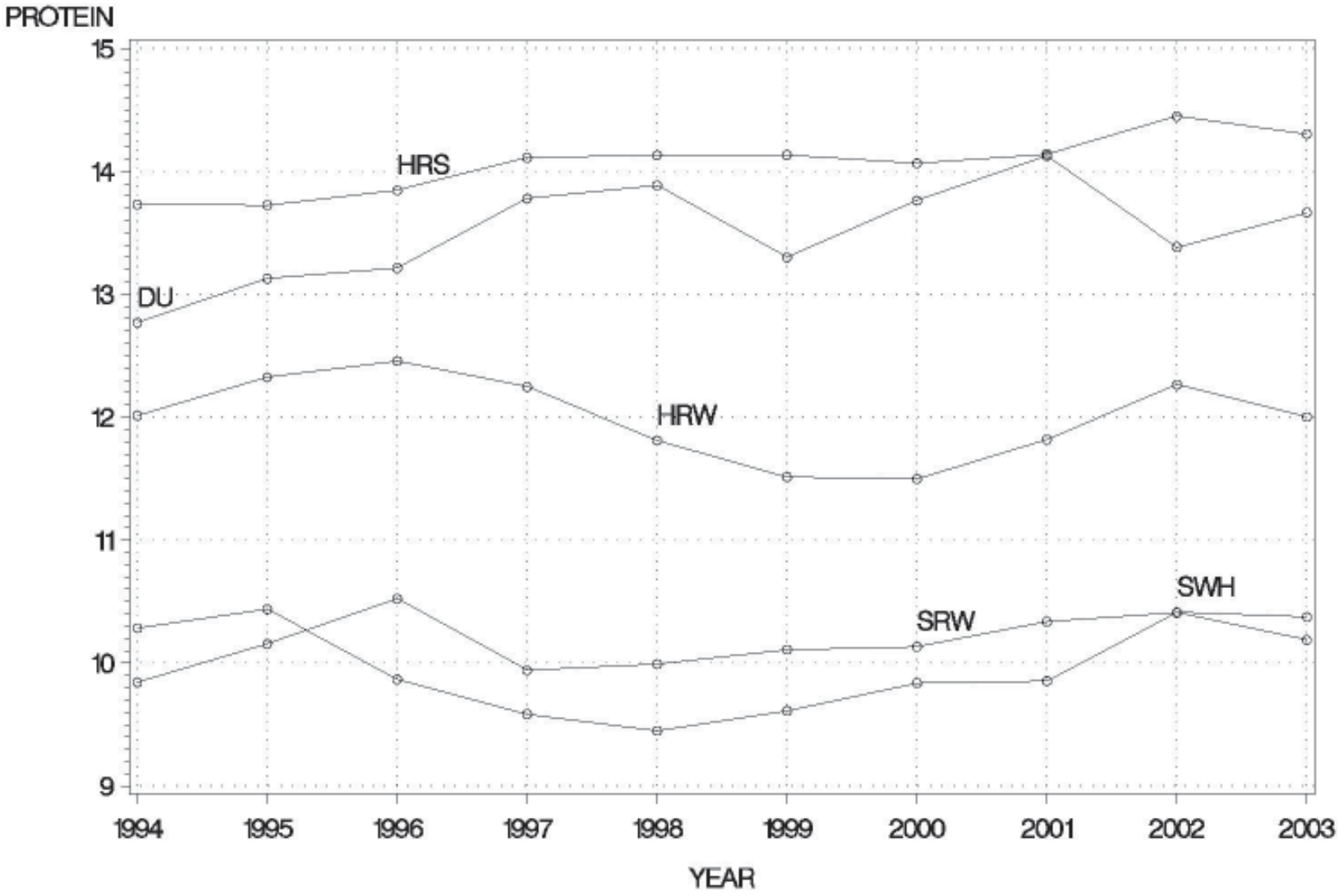
AVG DOCKAGE BY CLASS




U.S. WHEAT EXPORTED, 1994–2003
AVG DOCKAGE BY DESTINATION COUNTRY
AVG DKG
0.85
0.80
0.75
0.70
0.65
0.60
0.55
0.50
0.45
0.40
0.35
0.30
0.25
VENEZUELA
EGYPT
CHINA MAIN
KOREA REP
JAPAN
TAIWAN
PHILIPPINES
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
YEAR

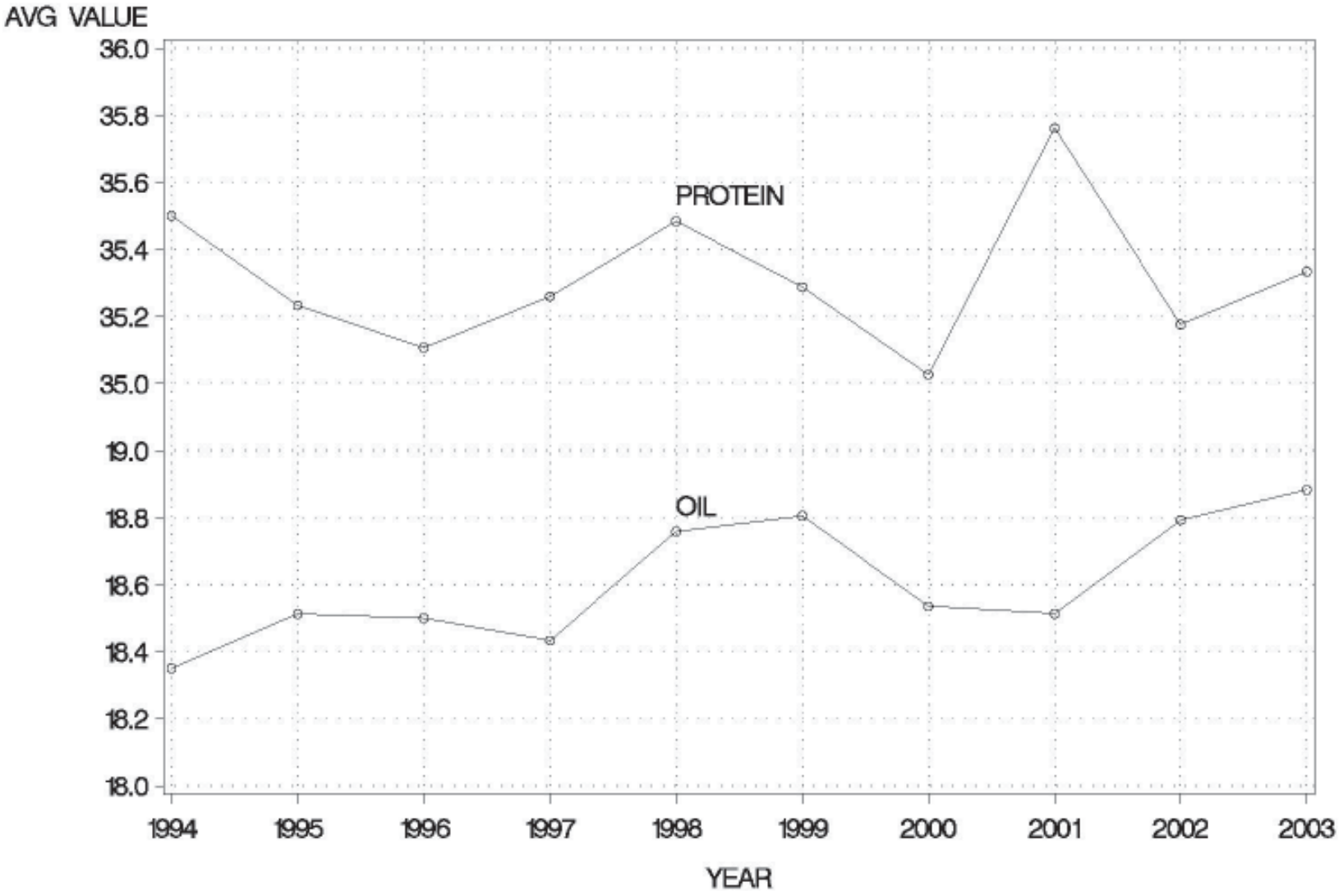
U.S. WHEAT EXPORTED, 1994–2003

AVG PROTEIN(12% M) BY CLASS



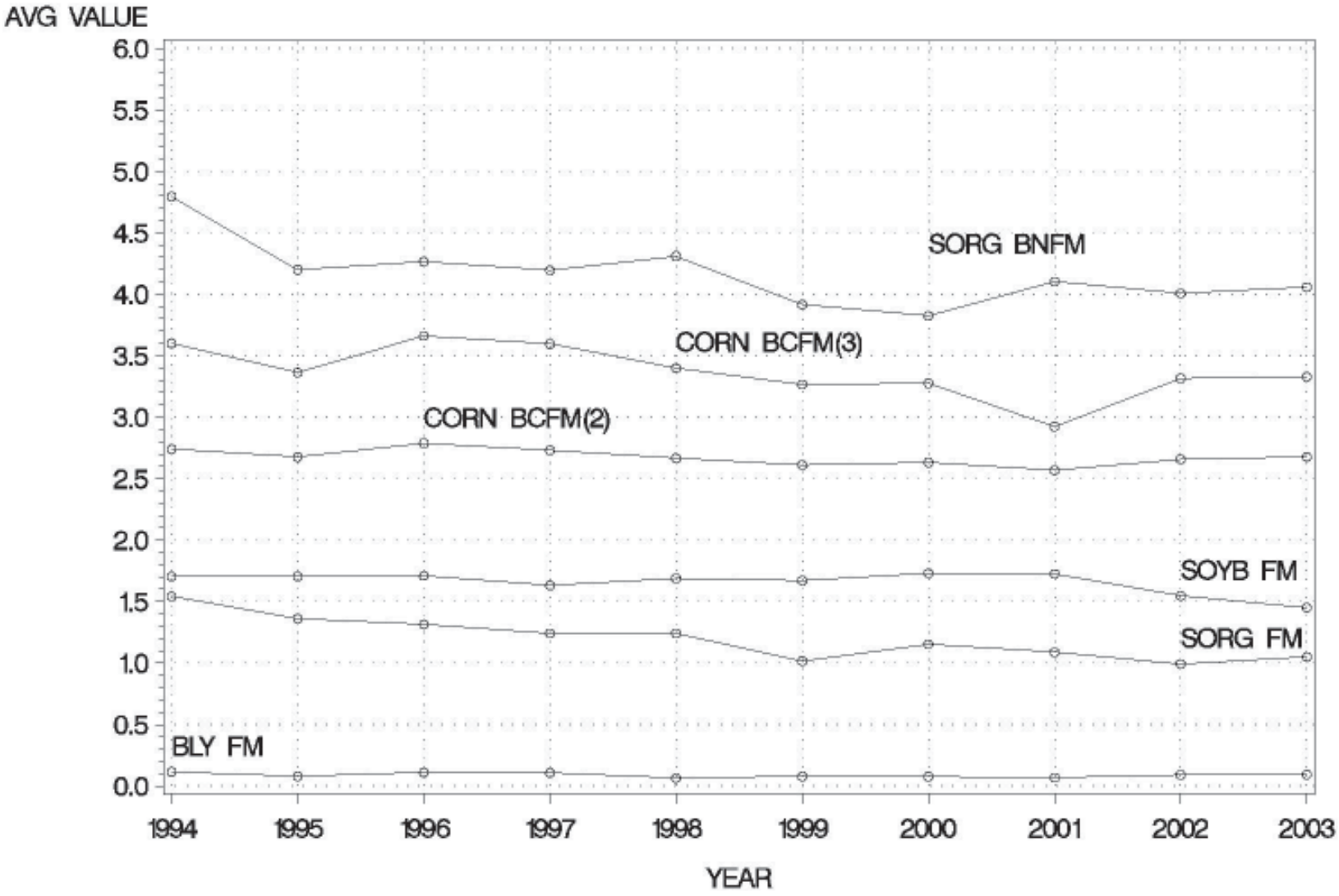
U.S. SOYBEANS EXPORTED, 1994–2003

AVG PROTEIN AND OIL (13% M)



U.S. GRAINS EXPORTED, 1994–2003

AVG FM BNFM BCFM



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